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# Exogenous Jasmonic Acid Alleviates Blast Resistance Reduction Caused by *LOX3* Knockout in Rice

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**A**

**B**

*>ΔLox3 #2*

ACTGCCTACTTTTTGTCCTGACTACAGTATCACAGAATGCTGGGAGGGCTCAAGGACAAGCTGACAGGGAA
AAATGGAAATAAGATCAAAGGCTTGGCTGTGCTGATGAGCCGAAAATTACTGGATCCAAGGGACTTCACTG
CCTCGCTCCTCGACAACATGATGACGTTGTAGACAACATCATCTGCTGCCTTGTCGTCACCACTGCTGCCGAC
CACCAAACTGATGTTTCTCCTCCTTTTCCTCCTTTACTACTTTTGATGATGTACATGATGGCTGTGATGAAAAA
ATAATCGATGATCACTCCTCACTCCTCACAAATTATAGAGAAACAACGAGGAGACAGCCAGCGACGACACTG
ATGAGACTACTCTACTGTTGTATATGCTGTGATGAGACAACGATGACGGGGGGATGATAGGAGCATAAGAGA
ATATGCAGCAGGGGGTGACGAATTAACCACCATCATCATCACGAGAGGACACCATCATCACGATGATGATAA
CGGGAAAATGACCAACATGGTGGTGCCAGGCCCATCTTCTTCAGAACCACCACCAGAACCAGGTCCTTCTT
CAGAACAATAACCTTCAAGGTGGCCCTGGTTGTACATATGTGTTGTGCCACTCCTGGATCTACCCTGTGGAAA
GACCACTACATCTATCTCTTGCAACATGAATCAGATGAATAACCAGCTATTACACCACCGCTCTTCTGGTCTGG
CAGAATCTCCTATCTGGTAGTAATCTGAATATCACTCTGATGCTAGTACGACTGATGACTATATATATCATCGATC
ATACTAGTAAGTCGCATAGTCTACATACATCGA

**C**

*>ΔLox3 #9*

TTGCCTTCATAATTGTTACTGTACTACAGTATCACAGAATGCTGGGAGGGCTCAAGGACAAGCTGACAGGGA
AAAATGGAAATAAGATCAAAGGCTTGGCTGTGCTGATGAGCCGAAAATTACTGGATCCAAGGGACTTCACT
GCCTCGCTCCTCGACAACGTCATGAGGTCTTTGGAAACAGCATCACCTGCCAGCTTGTCAGCGCCACTGTTG
CCGACCAAAGTACTGATCTTTCTCCATTTCTTCCTCGCTTACTTTGCATGAGTTTGTACATGTTTGCTATGTAGA
AAGAATCAAGGATCAGTACTCAGTACTCAGCACAGATTGAACGGAAACAAGGTGAAAACGGCCAGTGACA
CAAATGAAGTGACTAACCTATTGTCTTATATGCTATGTGCAGACAATGAGGGCAGGGGGATAGTTGGATCAG
AGGCGAATCTGGAGCAGGGGTTGACAGATTTACCATCGGTATCACAAGGGGAGTCCAAGCTCACAGTGAG
GTTCACTGTGAGATATGGACAAATGTGGTGTGCCGGGGGCCATCATCCTCAAAAACCACCACTACACCAAGC
TCTTCCTCAAGACCATCCCCCTCCGTGATGCCCGTGTGTGAGACTCTATTGTGTGTGGTGCCCTCTCCTGTATC
TACCGTGGTGGAAAGCACCACTACTATCATATCTTCTTTGCACACTGTGAAAGTCGAGAGAGAATAGCGAGT
CTATACACCACCACGTCTCTCTTTGTGCTCTTGAGATATCTTCATATTGTGTATAGTGATATCGAGAGTATTATAA
CATCGTGAAAGCGTATATTTTACGCGATAGAGAGTGACTATATTATATTTTAAATACTCCTCGATCATATACTTAA
AAAAAAGCTCTGATTAAATCTCAACAAAAAAAAAAGCAAAAAAATT

**D**

*>ΔLox3 #12*

ACGCTACTTTTGTCCTGACTACAGTATCACAGAATGCTGGGAGGGCTCAAGGACAAGCTGACAGGGAAAAA
TGGAAATAAGATCAAAGGCTTGGCTGTGCTGATGAGCCGAAAATTACTGGATCCAAGGGACTTCACTGCCT
CGCTCCTCGACAACGTCATGAGGTCTTTGGAAACAGCATCACCTGCCAGCTTGTCAGCGCCACTGTTGCCGA
CCAAAGTACTGATCTTTCTCCATTTCTTCCTCGCTTACTTTGCATGAGTTTGTACATGTTTGCTATGTAGAAAG
AATCAAGGATCAGTACTCAGTACTCAGCACAGATTGAACGGAAACAAGGTGAAAACGGCCAGTGACACAA
ATGAAGTGACTAACCTATTGTCTTATATGCTATGTGCAGACAATGAGGGCAGGGGGATAGTTGGATCAGAGG
CGAATCTGGAGCAGGGGTTGACAGATTTACCATCGGTATCACAAGGGGAGTCCAAGCTCACAGTGAGGTTC
ACTGGGAGATGGACAAGCATGGTGTGCCAGGGGCCATCATCATCAAGAACCACCACAGTACCAAGTTCTTC
CTCAAGACCATCACCCTCCATGATGTCCCTGGCTGTGACACTATTGTGTTTGTTGCCAACTCCTGGATCTACCC
TGTTGGAAAGTACCACTACAATCGTATCTTCTTTGCAAACAATGTAAGTCAGGAGTGATTAGCAAGTCTAAAT
ACCACAACGCCTCCCTTTCTGTTCTTGGCAGATCTTCTTATCCTGTTTAAGGTTATCGTGAGTAATTTAACATCT
TGTAAGTGCATAGTTTAAACGATAGTGAATGACTATATTATATTTAATTAATCATCGATCATATACTTAGTAAAAA
GTTCTGCAATTAAGCTCACACATCATCATACGATAGAGAAAACCTT

**Figure S1.** The mutant allele and sequences of *LOX3* knockout rice lines by the first-generation sequencing technique. (A) Sequencing result of *LOX3* knockout rice line #2. (B, C and D) The sequences from three *LOX3* knockout rice lines #2, #9 and #12. Red arrows: double peak.

**Figure S2.** Expression of *LOX3* in $T_1$ generations of *LOX3* knockout transgenic rice lines and WT. The data are expressed as mean ± standard deviation (SD). Different lowercase letters above the columns indicate significant differences ($p < 0.05$).

**Figure S3.** The 100-g grain weight of three *ΔLox3* transgenic rice lines and WT. The data are expressed as mean ± standard deviation (SD). Different lowercase letters above the columns indicate significant differences ($p < 0.05$).

**Table S1.** Primers used in this study.

| Gene name | Primer sequence (5'–3') |
|---|---|
| Rice gene expression | |
| *Ubiqutin* | F: CTGTCAACTGCCGCAAGAAG |
| | R: GGCGAGTGACGCTCTAGTTC |
| *OsbHLH35* | F: GTCATTTTTGCGACACCCCA |
| | R: CCTCGCAAGAAAACAACCACC |
| *OsAOS2* | F: GGAGGAAGCTGCTGCAATAC |
| | R: GGAGGTTGAAGCTTTGGTGA |
| *OsWRKY45* | F: AATCATGGATGGACACGGGC |
| | R: AGCTGAGACGACACATCAACA |
| *OsPR1a* | F: TCGTATGCTATGCTA CGTGTTT |
| | R: CACTA AGCAAATACGGCTGACA |
| *OsLOX3* | F: TCGCATTGGCTCGCACCCT |
| | R: TCGTCTTCTTCAGCCGCACGAT |
| *OsRbohB* | F: AGCTGCACCCTTGCATCTTCTCTCT |
| | R: ATCCGTAGGGCTTTGACATT |
| *OsPOX1* | F: TATGCGTTTCACTTGCTT |
| | R: CTCCTACACTTTGCGTTT |
| *M. oryzae* gene expression | |
| *MoActin* | F: CCATGTACCCTGGTCTTTCG |
| | R: TTCGAGATCCACATCTGCTG |
| *MoBAS4* | F: TGTGTCAGAACCTACCCCGA |
| | R: CGCCAAGGTTAGGGCATTTC |
| *MoCDIP1* | F: CCTTACTTTGGGCTCCGGTT |
| | R: CGCACGTTGAAGTTGTCTGG |
| Fungal relative growth | |
| *q-gUBQ* | F: TTCTGGTCCTTCCACTTTCAG |
| | R: ACGATTGATTTAACCAGTCCATGA |
| *q-gPot2* | F: ACGACCCGTCTTTACTTATTTGG |
| | R: AAGTAGCGTTGGTTTTGTTGGAT |

**Table S2.** Specific DEGs in #2_vs_WT, *M. oryzae* infected #2_vs_*M. oryzae* infected WT, JA + *M. oryzae* infected #2_vs_JA + *M. oryzae* infected WT.

| **Specific DEGs in B1_vs_A1 comparing B1_vs_A1, B2_vs_A2 and B3_vs_A3** | | | |
|---|---|---|---|
| **Gene ID** | **Up/down** | **Gene name** | **Description** |
| gene-psbA | DOWN | - | - |
| Os01g0130900 | UP | - | Conserved hypothetical protein |
| Os01g0155800 | UP | - | Conserved hypothetical protein |
| Os01g0162400 | UP | - | Conserved hypothetical protein |
| Os01g0176700 | UP | - | Myb-like DNA-binding domain, SHAQKYF class domain containing protein |
| Os01g0212400 | UP | OsEFCAX1 | EF-Hand type domain containing protein |
| Os01g0224100 | DOWN | OsERF | - |
| Os01g0256500 | UP | - | Similar to ZnI |
| Os01g0332150 | DOWN | - | Hypothetical protein |
| Os01g0339500 | DOWN | ONAC030 | Similar to No apical meristem protein |
| Os01g0392600 | UP | - | Conserved hypothetical protein |
| Os01g0537250 | UP | - | Protein of unknown function DUF3778 domain containing protein |
| Os01g0566701 | UP | OsbHLH117 | Non-protein coding transcript |
| Os01g0580500 | UP | ACO7 | ACC oxidase, Ethylene biosynthesi |
| Os01g0587400 | UP | - | Serine/threonine protein kinase-related domain containing protein |
| Os01g0606900 | DOWN | OsDjC10 | Heat shock protein DnaJ, N-terminal domain containing protein |
| Os01g0692400 | UP | - | Conserved hypothetical protein |
| Os01g0701700 | UP | - | SAM dependent carboxyl methyltransferase family protein |
| Os01g0707500 | UP | OsbHLH118 | Similar to Transcription factor LAX PANICLE |
| Os01g0723100 | UP | - | Senescence-associated family protein |
| Os01g0740300 | UP | - | Hypothetical protein |
| Os01g0740651 | DOWN | - | Hypothetical protein |
| Os01g0756300 | UP | - | Conserved hypothetical protein |
| Os01g0806200 | UP | OsFbox045 | Cyclin-like F-box domain containing protein |
| Os01g0823700 | UP | - | Protein of unknown function DUF641, plant domain containing protein |
| Os01g0826000 | UP | OsATX | Heavy metal transport/detoxification protein domain containing protein |
| Os01g0835500 | DOWN | rbohE | Similar to Respiratory burst oxidase protein |
| Os01g0856500 | UP | OsLAX1 | Auxin transporter, Primary root and root hair elongation, Cd stress respons |

| | | | |
|---|---|---|---|
| Os01g0866200 | UP | - | Similar to Histone H3 |
| Os01g0871100 | DOWN | - | Alpha/beta hydrolase fold-1 domain containing protein |
| Os01g0892800 | UP | OsSTA40 | Similar to Ankyrin-kinase |
| Os01g0910800 | UP | - | Conserved hypothetical protein |
| Os01g0956200 | UP | - | Glycosyltransferase AER61, uncharacterized domain containing protein |
| Os02g0100200 | DOWN | - | Steroid nuclear receptor, ligand-binding domain containing protein |
| Os02g0129800 | UP | - | Conserved hypothetical protein |
| Os02g0490500 | UP | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os02g0535901 | UP | OsFbox092 | Cyclin-like F-box domain containing protein |
| Os02g0580900 | UP | OsNRT1.3A | TGF-beta receptor, type I/II extracellular region family protein |
| Os02g0623400 | UP | OsG1L3 | Similar to G1-like protein |
| Os02g0671800 | UP | - | Integrase, catalytic core domain containing protein |
| Os02g0673500 | UP | - | Basic helix-loop-helix dimerisation region bHLH domain containing protein |
| Os02g0684500 | UP | - | Similar to Histone H4 |
| Os02g0689900 | UP | OsNRT1.5A | TGF-beta receptor, type I/II extracellular region family protein |
| Os02g0696900 | UP | OsKANADI1 | Myb-like DNA-binding domain, SHAQKYF class domain containing protein |
| Os02g0702300 | UP | - | Conserved hypothetical protein |
| Os02g0716500 | UP | OsFAD2 | Delta12-fatty acid desaturase |
| Os02g0720500 | UP | - | Peptidase A1 domain containing protein |
| Os02g0755400 | UP | - | Similar to RNA recognition motif-containing protein SEB-4 |
| Os02g0772100 | UP | - | Conserved hypothetical protein |
| Os02g0787300 | UP | SMG1 | Mitogen-activated protein kinase kinase 4, Defense response, Cell proliferation, Grain growt |
| Os02g0787600 | UP | OsGLR1.2 | Glutamate receptor-related domain containing protein |
| Os02g0814000 | DOWN | - | Protein of unknown function DUF862, eukaryotic domain containing protein |
| Os03g0116400 | UP | OsRhmbd7 | Similar to Membrane protein |
| Os03g0149300 | UP | - | Protein of unknown function DUF6, transmembrane domain containing protein |
| Os03g0152000 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os03g0170900 | UP | OsSUT1 | Sucrose transporter |
| Os03g0183200 | UP | OsERF | - |
| Os03g0195300 | UP | OsSultr2 | Similar to Low affinity sulphate transporter 3 |
| Os03g0200200 | UP | - | Conserved hypothetical protein |
| Os03g0223301 | UP | - | Hypothetical gene |

| | | | |
|---|---|---|---|
| Os03g0230300 | UP | OsSRO1c | Homologue of SRO (similar to RCD one), Regulation of stomatal closure, Abiotic stress respons |
| Os03g0261800 | UP | - | Protein of unknown function DUF3049 domain containing protein |
| Os03g0282232 | UP | - | Conserved hypothetical protein |
| Os03g0299800 | UP | - | Protein of unknown function Cys-rich family protein |
| Os03g0304500 | UP | - | Tetratricopeptide-like helical domain containing protein |
| Os03g0321300 | UP | OsFbox137 | Cyclin-like F-box domain containing protein |
| Os03g0371000 | UP | OsSTA101 | Similar to Cytochrome P450 family protein, expressed |
| Os03g0375833 | UP | - | Non-protein coding transcript |
| Os03g0389100 | UP | OsMC8 | Peptidase C14, caspase catalytic domain containing protein |
| Os03g0426350 | UP | - | Conserved hypothetical protein |
| Os03g0561283 | UP | - | Conserved hypothetical protein |
| Os03g0613100 | UP | - | Conserved hypothetical protein |
| Os03g0624300 | UP | - | Conserved hypothetical protein |
| Os03g0668500 | UP | SIP31 | Conserved hypothetical protein |
| Os03g0669300 | UP | - | Beta-1,3-glucanase-like protein |
| Os03g0685300 | UP | - | Glutamine amidotransferase class-I domain containing protein |
| Os03g0711150 | DOWN | - | Hypothetical protein |
| Os03g0758000 | UP | OsWRKY3 | Similar to WRKY23 transcription factor (Fragment) |
| Os03g0787300 | DOWN | OsDjA5 | Similar to DnaJ homolog |
| Os03g0799000 | UP | - | Similar to Histone H1 |
| Os03g0826900 | UP | OsEnS-58 | Conserved hypothetical protein |
| Os04g0128900 | UP | YUCCA7 | Flavin monooxygenase-like enzyme, Auxin biosynthesi |
| Os04g0129900 | UP | - | Similar to OSIGBa0103I21.1 protein |
| Os04g0200700 | UP | - | Hypothetical protein |
| Os04g0249500 | UP | SUS7 | Similar to H0211A12.6 protein |
| Os04g0310400 | UP | OsWAK36 | Similar to H0211A12.15 protein |
| Os04g0389901 | DOWN | - | Hypothetical gene |
| Os04g0397800 | UP | - | Conserved hypothetical protein |
| Os04g0398000 | UP | OsERF101 | ERF transcription factor, A member of APETALA2/Ethylene-Responsive Element Binding Protein(AP2/EREBP) family, Regulation of drought stress response, Innate immunit |
| Os04g0429600 | UP | OsCslH3 | Putative cellulose synthase-like protein H3 |
| Os04g0430600 | UP | - | Similar to OSIGBa0160I14.1 protein |
| Os04g0431700 | UP | Bph6 | Exocyst-localized protein, Resistance to planthoppers, (Nipponbare: BPH-susceptible |
| Os04g0475600 | UP | - | 2OG-Fe(II) oxygenase domain containing protein |
| Os04g0493600 | UP | - | Similar to Lectin-C precursor (PL-C) |

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|---|---|---|---|
| Os04g0498900 | UP | - | Similar to N-acetyltransferase ESCO1 |
| Os04g0514400 | DOWN | - | Peptidoglycan binding-like domain containing protein |
| Os04g0531900 | UP | - | Short-chain dehydrogenase/reductase SDR domain containing protein |
| Os04g0580800 | UP | OsRFPH2-6 | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os04g0612301 | DOWN | - | Hypothetical protein |
| Os04g0684600 | UP | - | Similar to H0913C04.5 protein |
| Os04g0688300 | UP | prx61 | Haem peroxidase, plant/fungal/bacterial family protein |
| Os04g0689700 | UP | - | RNA recognition motif, RNP-1 domain containing protein |
| Os05g0114700 | UP | - | Myb-type HTH DNA-binding domain domain containing protein |
| Os05g0142000 | UP | - | Conserved hypothetical protein |
| Os05g0186900 | UP | OsIAA16 | Similar to Auxin-responsive protein IAA16 |
| Os05g0209500 | UP | - | Conserved hypothetical protein |
| Os05g0269500 | UP | - | Generative cell specific-1, HAP2-GCS1 domain containing protein |
| Os05g0277350 | DOWN | - | Similar to Leucine Rich Repeat family protein, expressed |
| Os05g0361500 | UP | OsPME17 | Similar to Pectinesterase |
| Os05g0380900 | DOWN | OsCML15 | Similar to Polcalcin Jun o 2 (Calcium-binding pollen allergen Jun o 2) |
| Os05g0401500 | UP | - | Similar to oxidoreductase, 2OG-Fe oxygenase family protein |
| Os05g0426000 | UP | OsSWEET1b | MtN3 and saliva related transmembrane protein family protein |
| Os05g0447200 | UP | OsLAX3 | Similar to auxin transporter-like protein 1 |
| Os05g0461600 | UP | - | Similar to SIK1 protein (Nucleolar protein NOP56) |
| Os05g0465000 | UP | - | Conserved hypothetical protein |
| Os05g0468800 | UP | - | Phosphatidylethanolamine-binding protein PEBP domain containing protein |
| Os05g0503650 | DOWN | - | Non-protein coding transcript |
| Os05g0506000 | UP | - | Similar to MS5-like protein (Fragment) |
| Os05g0590201 | DOWN | - | Hypothetical gene |
| Os06g0118700 | UP | - | Peptidase A1 domain containing protein |
| Os06g0130900 | UP | - | Similar to Histone H3 (Fragment) |
| Os06g0226700 | UP | OsTCP19 | Similar to PCF1 |
| Os06g0294000 | UP | - | Conserved hypothetical protein |
| Os06g0317200 | UP | - | Similar to glycine-rich cell wall structural protein |
| Os06g0559600 | UP | - | Hypothetical conserved gene |
| Os06g0604200 | UP | OsPLDalpha4 | Chloroplast-localized phospholipase D, Herbivore defens |
| Os06g0667000 | UP | - | Serine/threonine protein kinase domain containing protein |
| Os06g0672400 | UP | OsG1L2 | Protein of unknown function DUF640 domain containing protein |

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|---|---|---|---|
| Os07g0111400 | UP | OsWRKY29 | WRKY transcription factor 29 |
| Os07g0147550 | UP | OsPsbR2 | Similar to Photosystem II 10 kDa polypeptide, chloroplast |
| Os07g0178800 | DOWN | - | Similar to Low molecular mass early light-inducible protein HV90, chloroplast precursor (ELIP) |
| Os07g0190800 | UP | OsTRXh5 | Similar to Thioredoxin h |
| Os07g0442800 | UP | - | Conserved hypothetical protein |
| Os07g0480800 | UP | OsXTH21 | Cellulase (EC 3.2.1.4) |
| Os07g0509800 | UP | OsAPRL1 | Similar to adenosine 5'-phosphosulfate reductase 2 |
| Os07g0542400 | UP | - | Similar to Receptor protein kinase |
| Os07g0543100 | DOWN | - | Similar to Beta-amylase (EC 3.2.1.2) |
| Os07g0566500 | UP | ONAC010 | Similar to NAC domain protein |
| Os07g0584100 | UP | OsWNK5 | Similar to MAP kinase-like protein |
| Os07g0605200 | DOWN | MADS18 | APETALA1 (AP1)/ FRUITFULL (FUL)-like MADS box transcription factor, Specification of inflorescence meristem identit |
| Os07g0624100 | DOWN | - | Similar to cDNA clone:J033024N05, full insert sequence |
| Os07g0631200 | DOWN | - | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os07g0664600 | UP | RMP8 | Glucose/ribitol dehydrogenase family protein |
| Os08g0108100 | UP | - | Pectinesterase inhibitor domain containing protein |
| Os08g0113000 | UP | prx117 | Similar to Peroxidase 47 precursor (EC 1.11.1.7) (Atperox P47) (ATP32) |
| Os08g0139700 | DOWN | OsTPS29 | Similar to terpene synthase 6 |
| Os08g0158600 | UP | - | Similar to Cell wall invertase (EC 3.2.1.26) |
| Os08g0246800 | UP | - | Conserved hypothetical protein |
| Os08g0389601 | UP | - | Non-protein coding transcript |
| Os08g0403300 | UP | - | Heavy metal transport/detoxification protein domain containing protein |
| Os08g0525000 | UP | OsRab11G2 | Ras GTPase family protein |
| Os08g0540400 | UP | OsCDPK21 | Similar to Calcium-dependent protein kinase |
| Os08g0546800 | DOWN | HSFB2B | Similar to Heat stress transcription factor B-2b |
| Os09g0109600 | UP | OsDSSR1 | Small peptide, Drought toleranc |
| Os09g0330700 | UP | - | Ankyrin repeat domain containing protein |
| Os09g0356800 | DOWN | - | Protein kinase, core domain containing protein |
| Os09g0403000 | UP | - | Hypothetical conserved gene |
| Os09g0408550 | UP | - | Heavy metal-associated domain, HMA domain containing protein |
| Os09g0412400 | UP | - | Conserved hypothetical protein |
| Os09g0433600 | UP | - | Similar to Histone H4 |
| Os09g0455300 | UP | OsbHLH120 | Similar to INDEHISCENT protein |

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|---|---|---|---|
| Os09g0457900 | DOWN | ERF102 | AP2/ERF transcription factor, Regulation of the internode elongatio |
| Os09g0494600 | UP | - | Protein of unknown function DUF599 family protein |
| Os09g0559600 | UP | - | Thioredoxin domain 2 containing protein |
| Os10g0104000 | UP | - | Hypothetical conserved gene |
| Os10g0109600 | UP | poxA | Peroxidase (EC 1.11.1.7) |
| Os10g0154700 | UP | OsCYP18-4 | Similar to Cyclophilin Dicyp-2 |
| Os10g0210500 | UP | OsUMAMIT15 | Protein of unknown function DUF6, transmembrane domain containing protein |
| Os10g0409400 | UP | RD22 | beta subunit of polygalacturonase 1, Abiotic stress respons |
| Os10g0478000 | UP | G1L5 | Transcriptional regulator, Regulator of meristem activity, Regulation of inflorescence developmen |
| Os10g0509401 | UP | - | Conserved hypothetical protein |
| Os10g0516900 | UP | - | Conserved hypothetical protein |
| Os10g0551200 | UP | - | Similar to Scl1 protein (Fragment) |
| Os10g0567900 | UP | - | Similar to F-box protein interaction domain containing protein, expressed |
| Os10g0576600 | UP | - | Tetratricopeptide-like helical domain containing protein |
| Os11g0133001 | UP | - | Similar to Ser/Thr protein kinase (Fragment) |
| Os11g0133100 | UP | - | Similar to D-mannose binding lectin family protein |
| Os11g0149200 | UP | - | Conserved hypothetical protein |
| Os11g0170900 | UP | OsBURP17 | Similar to BURP domain-containing protein 17 |
| Os11g0177400 | UP | OsABCG27 | Similar to ATPase, coupled to transmembrane movement of substances |
| Os11g0213700 | UP | - | Leucine-rich repeat, typical subtype containing protein |
| Os11g0222900 | UP | - | NB-ARC domain containing protein |
| Os11g0226201 | DOWN | - | Similar to Protein kinase domain containing protein, expressed |
| Os11g0246250 | UP | - | Non-protein coding transcript |
| Os11g0289700 | UP | - | Cytochrome P450 family protein |
| Os11g0417800 | UP | - | Non-protein coding transcript |
| Os11g0470500 | UP | - | Similar to Protein kinase domain containing protein, expressed |
| Os11g0471300 | DOWN | - | Similar to OSIGBa0145N07.3 protein |
| Os11g0543100 | UP | - | Conserved hypothetical protein |
| Os11g0677101 | UP | - | Similar to NB-ARC domain containing protein |
| Os11g0685500 | DOWN | - | Hypothetical protein |
| Os11g0701500 | UP | - | Similar to Class III chitinase homologu |
| Os12g0199000 | UP | - | Similar to Jasmonate-induced protein |
| Os12g0210500 | UP | - | Conserved hypothetical protein |
| Os12g0476200 | UP | SWEET13 | Sucrose transporter, TAL effector PthXo2-dependent disease susceptibility to bacterial pathoge |

| | | | |
|---|---|---|---|
| Os12g0516000 | UP | - | Conserved hypothetical protein |
| Os12g0552400 | UP | - | Rossmann-like alpha/beta/alpha sandwich fold domain containing protein |
| Os12g0554100 | UP | OsTBL34 | Conserved hypothetical protein |
| Os12g0567300 | UP | R2R3-MYB | Myb transcription factor domain containing protein |
| Os12g0569700 | DOWN | OsHsp23.7 | Similar to Heat shock protein 70 |
| Os12g0595800 | UP | - | Similar to cDNA clone:J023098M23, full insert sequence |
| Os12g0630200 | UP | - | Thaumatin, pathogenesis-related family protein |
| **Specific DEGs in B2_vs_A2 comparing B2_vs_A2, B1_vs_A1 and B3_vs_A3** | | | |
| **Gene ID** | **up/down** | **Gene name** | **Description** |
| Os01g0106400 | UP | - | Similar to Isoflavone reductase homolog IRL (EC 1.3.1.-) |
| Os01g0111800 | UP | - | Conserved hypothetical protein |
| Os01g0111900 | UP | SIP34 | Glutelin family protein |
| Os01g0117200 | DOWN | OsRLCK16 | Similar to ARK protein (Fragment) |
| Os01g0140400 | UP | PLRRP | Similar to leucine-rich repeat protein-related |
| Os01g0174100 | DOWN | - | Conserved hypothetical protein |
| Os01g0194000 | UP | - | Conserved hypothetical protein |
| Os01g0195400 | UP | - | Harpin-induced 1 domain containing protein |
| Os01g0210400 | UP | - | Protein of unknown function DUF616 domain containing protein |
| Os01g0214600 | UP | OsGELP2 | Lipase, GDSL domain containing protein |
| Os01g0248701 | UP | - | Terpenoid synthase domain containing protein |
| Os01g0249200 | UP | OsGLP1-1 | Similar to Nectarin 1 precursor (EC 1.15.1.1) (Superoxide dismutase [Mn]) |
| Os01g0281600 | UP | OsENODL4 | Cupredoxin domain containing protein |
| Os01g0329900 | UP | OsGELP14 | Similar to Lipase homolog (Fragment) |
| Os01g0330100 | UP | OsGELP15 | Similar to Alpha-L-fucosidase 2 |
| Os01g0343300 | UP | OsGATA8 | Zinc finger, NHR/GATA-type domain containing protein |
| Os01g0508000 | UP | Os1bglu1 | Similar to Beta-glucosidase |
| Os01g0508100 | UP | RH3 | Ferritin/ribonucleotide reductase-like family protein |
| Os01g0508500 | UP | RH2 | Conserved hypothetical protein |
| Os01g0511800 | UP | - | Conserved hypothetical protein |
| Os01g0525700 | UP | - | Similar to DVL4/RTFL17 (ROTUNDIFOLIA LIKE 17) |
| Os01g0545100 | UP | OsMYB86-L1 | Conserved hypothetical protein |
| Os01g0555200 | DOWN | - | Asp/Glu racemase family protein |
| Os01g0601200 | UP | OsRLCK41 | Similar to Protein kinase family protein |
| Os01g0603300 | UP | - | Similar to MCB2 protein |
| Os01g0609900 | UP | OsPDR8 | Similar to Pleiotropic drug resistance protein 4 |

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|---|---|---|---|
| Os01g0618900 | UP | OsPGL31 | Similar to Polygalacturonase |
| Os01g0619800 | DOWN | - | Similar to Hydrolase, hydrolyzing O-glycosyl compounds |
| Os01g0619900 | DOWN | OsTCL2 | Similar to DNA binding |
| Os01g0625200 | UP | - | Similar to kinesin motor family protein |
| Os01g0652800 | UP | OsTBL57 | Protein of unknown function DUF231, plant domain containing protein |
| Os01g0656400 | UP | OsWRKY15 | Similar to WRKY transcription factor 15 |
| Os01g0659900 | UP | OsFBK1 | Kelch-domain-containing F-box protein, Component of an SCF E3 ligase, Regulation of anther and root secondary cell wall thickenings, Regulation of lignificatio |
| Os01g0660300 | UP | - | Similar to Pyruvate kinase |
| Os01g0670500 | UP | - | Conserved hypothetical protein |
| Os01g0681700 | DOWN | - | Hypothetical conserved gene |
| Os01g0690600 | UP | - | Conserved hypothetical protein |
| Os01g0695800 | UP | MDR4 | Similar to MDR-like ABC transporter |
| Os01g0697100 | UP | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os01g0702700 | UP | OsMYB14 | Similar to Transcription factor MYB86 (Myb-related protein 86) (AtMYB86) (Myb homolog 4) (AtMyb4) |
| Os01g0714800 | UP | OsWRKY26 | WRKY transcription factor 26 |
| Os01g0716200 | UP | - | IQ calmodulin-binding region domain containing protein |
| Os01g0717000 | UP | - | Similar to GmCK1p (EC 2.7.1.32) |
| Os01g0723600 | UP | - | Ribose-phosphate pyrophosphokinase 3 (EC 2.7.6.1) (Phosphoribosyl pyrophosphate synthetase 3) |
| Os01g0738300 | UP | - | Protein kinase, core domain containing protein |
| Os01g0744000 | UP | - | Similar to Kinesin heavy chain (Fragment) |
| Os01g0750000 | UP | OsRab11D2 | Similar to ras-related protein RIC2 |
| Os01g0787000 | UP | PRX19 | Similar to Peroxidase (EC 1.11.1.7) |
| Os01g0796000 | UP | - | Conserved hypothetical protein |
| Os01g0805900 | UP | OsTUB4 | Tubulin beta-2 chain (Beta-2 tubulin) |
| Os01g0813700 | UP | Os1bglu2 | Similar to Non-cyanogenic beta-glucosidase |
| Os01g0816100 | UP | OsNAC4 | Similar to NAC domain protein |
| Os01g0831250 | UP | - | Hypothetical gene |
| Os01g0834900 | UP | - | Hypothetical conserved gene |
| Os01g0842500 | UP | OsLAC5 | Similar to Laccase (EC 1.10.3.2) |
| Os01g0863300 | UP | - | Similar to MCB2 protein |
| Os01g0868900 | UP | OsSub11 | Peptidase S8, subtilisin-related domain containing protein |
| Os01g0872566 | UP | - | Hypothetical protein |
| Os01g0878900 | UP | - | Similar to 4,5-DOPA dioxygenase extradiol-like protein |
| Os01g0879200 | UP | DRR206 | Plant disease resistance response protein domain containing protein |

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|---|---|---|---|
| Os01g0882800 | UP | OsAAP11 E | Similar to Amino acid carrier (Fragment) |
| Os01g0883800 | DOWN | 20ox2 | Similar to GA C20oxidase2 |
| Os01g0896200 | UP | - | Similar to SF16 protein |
| Os01g0897700 | UP | OsFH1 | Similar to FH protein NFH1 |
| Os01g0908600 | UP | OsProT1 | Amino acid transporter, transmembrane domain containing protein |
| Os01g0914400 | UP | STOMAG EN | Similar to EPIDERMAL PATTERNING FACTOR-like protein 9 |
| Os01g0926600 | UP | OsGT47A | Similar to Pectin-glucuronyltransferase |
| Os01g0926700 | UP | OsIRX10 | Similar to secondary cell wall-related glycosyltransferase family 47 |
| Os01g0942300 | UP | OsEGL2 | Similar to Beta glucanase precursor (EC 3.2.1.73) (Fragment) |
| Os01g0951100 | UP | - | Arf GTPase activating protein family protein |
| Os01g0952000 | UP | GER8 | Similar to Germin-like protein 1-3 |
| Os01g0971400 | UP | - | Similar to Cysteine proteinase |
| Os02g0125400 | UP | OsCYCP4 | Negative regulatory factor PREG domain containing protein |
| Os02g0151300 | UP | OsGH9B7 | Similar to Cellulase (Fragment) |
| Os02g0199600 | DOWN | - | Similar to F-box domain containing protein |
| Os02g0275200 | UP | - | Xyloglucan fucosyltransferase family protein |
| Os02g0303500 | UP | - | Eggshell protein family protein |
| Os02g0322400 | UP | - | Similar to NPKL2 (Fragment) |
| Os02g0327500 | UP | - | Protein of unknown function DUF266, plant family protein |
| Os02g0329800 | UP | XAX1 | Glycosyltransferase, Xylan biosynthesi |
| Os02g0465600 | UP | - | Kelch-type beta propeller domain containing protein |
| Os02g0526000 | UP | - | Similar to H0502B11.6 protein |
| Os02g0538700 | UP | - | Harpin-induced 1 domain containing protein |
| Os02g0549200 | UP | OsRLCK7 3 | Similar to Ser Thr specific protein kinase-like protein |
| Os02g0549401 | UP | - | Hypothetical gene |
| Os02g0569400 | UP | CYP76M8 | Cytochrome P450 family protein |
| Os02g0589900 | UP | - | Hypothetical conserved gene |
| Os02g0597300 | UP | - | Leucine-rich repeat domain containing protein |
| Os02g0602900 | DOWN | - | Conserved hypothetical protein |
| Os02g0618400 | UP | OsMPS | R2R3-type MYB transcription factor, Adaptive growth regulatio |
| Os02g0620400 | UP | - | RmlC-like jelly roll fold domain containing protein |
| Os02g0625300 | UP | OsPPCK2 | Similar to PEPC kinase |
| Os02g0626400 | UP | OsPAL | Phenylalanine ammonia-lyase (EC 4.3.1.5) |
| Os02g0627100 | UP | OsPAL1 | Similar to Phenylalanine ammonia-lyase (EC 4.3.1.5) |
| Os02g0632800 | UP | WAK14 | Wall-associated kinase, Positive regulation of rice blast resistanc |
| Os02g0638650 | UP | OsERF | - |
| Os02g0639300 | UP | OsCBSX11 | Conserved hypothetical protein |
| Os02g0640300 | UP | - | Similar to Membrane steroid binding protein 1 (AtMP1) |

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|---|---|---|---|
| Os02g0654300 | UP | - | Similar to Protein kinase KIPK |
| Os02g0655800 | UP | - | Serine/threonine protein kinase domain containing protein |
| Os02g0657000 | UP | OsERF | - |
| Os02g0668500 | DOWN | - | Cellular retinaldehyde-binding/triple function, C-terminal domain containing protein |
| Os02g0675700 | UP | - | Protein of unknown function DUF248, methyltransferase putative family protein |
| Os02g0676800 | UP | OsERF | - |
| Os02g0677300 | UP | OsDREB1G | Similar to CRT/DRE binding factor 1 |
| Os02g0684400 | DOWN | - | Similar to OXS |
| Os02g0712700 | UP | - | Concanavalin A-like lectin/glucanase domain containing protein |
| Os02g0715300 | UP | - | Conserved hypothetical protein |
| Os02g0718100 | UP | OsAGP22 | Non-protein coding transcript |
| Os02g0718600 | UP | OsAGP21 | Conserved hypothetical protein |
| Os02g0719600 | UP | JMT-2 | SAM dependent carboxyl methyltransferase family protein |
| Os02g0720600 | UP | - | Peptidase A1 domain containing protein |
| Os02g0738200 | UP | OsPUB40 | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os02g0738300 | UP | - | Conserved hypothetical protein |
| Os02g0755000 | UP | OsTSD2 | Putative methyltransferase, Pectin synthesis and methylesterification, Root development, Cellular adhesio |
| Os02g0768400 | UP | - | Hypothetical gene |
| Os02g0771400 | UP | OsPFA-DSP2 | Protein-tyrosine phosphatase, SIW14-like domain containing protein |
| Os02g0771700 | UP | Gns9 | Glycoside hydrolase, family 17 protein |
| Os02g0775600 | UP | - | Zinc finger, C2H2-like domain containing protein |
| Os02g0781400 | UP | - | Similar to 20 kDa chaperonin, chloroplast precursor (Protein Cpn21) (Chloroplast protein Cpn10) (Chloroplast chaperonin 10) (Ch-CPN10) |
| Os02g0803300 | UP | - | Epsin-like, N-terminal domain containing protein |
| Os02g0829000 | UP | - | Hypothetical gene |
| Os03g0113000 | UP | OsRLCK95 | Serine/threonine protein kinase domain containing protein |
| Os03g0116300 | UP | - | Similar to catalytic/ hydrolase |
| Os03g0118800 | UP | - | Similar to Hydroxymethylglutaryl-CoA synthase |
| Os03g0123800 | UP | - | Similar to Hydrolase |
| Os03g0126300 | UP | - | Similar to cDNA clone:001-042-G03, full insert sequence |
| Os03g0130100 | UP | - | Similar to Acyl-activating enzyme 11 |
| Os03g0160600 | DOWN | - | Similar to type I inositol-1,4,5-trisphosphate 5-phosphatase CVP2 |
| Os03g0162900 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os03g0183500 | UP | - | Protein of unknown function DUF581 family protein |

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|---|---|---|---|
| Os03g0203700 | UP | osACA1 | Similar to Calcium-transporting ATPase 2, plasma membrane-type (EC 3.6.3.8) (Ca(2+)-ATPase isoform 2) |
| Os03g0232800 | UP | - | Similar to Lecithin:cholesterol acyltransferase family protein, expressed |
| Os03g0234900 | UP | PRX39 | Similar to Peroxidase (EC 1.11.1.7) |
| Os03g0246500 | UP | - | Protein of unknown function DUF869, plant family protein |
| Os03g0258200 | UP | - | Alpha/beta hydrolase fold-3 domain containing protein |
| Os03g0262700 | UP | - | Harpin-induced 1 domain containing protein |
| Os03g0264400 | UP | OASA2 | Anthranilate synthase alpha 2 subunit |
| Os03g0272650 | DOWN | - | Non-protein coding transcript |
| Os03g0280400 | DOWN | - | Similar to plant-specific domain TIGR01589 family protein |
| Os03g0285200 | UP | - | Conserved hypothetical protein |
| Os03g0285300 | UP | - | Conserved hypothetical protein |
| Os03g0289800 | UP | - | Similar to Leucoanthocyanidin dioxygenase-like protein |
| Os03g0300900 | UP | - | Glycosyl transferase, family 8 protein |
| Os03g0301800 | UP | - | Similar to Kinesin-like polypeptides 9 (Fragment) |
| Os03g0304800 | UP | - | Lg106-like family protein |
| Os03g0305400 | UP | - | UspA domain containing protein |
| Os03g0316200 | UP | OsGolS1 | Similar to Galactinol synthase (Fragment) |
| Os03g0323600 | DOWN | OsDjC29 | Similar to DnaJ domain containing protein, expressed |
| Os03g0341600 | DOWN | - | Pollen Ole e 1 allergen/extensin domain containing protein |
| Os03g0342100 | DOWN | - | Pollen Ole e 1 allergen/extensin domain containing protein |
| Os03g0344400 | UP | - | Hypothetical conserved gene |
| Os03g0368900 | UP | PRX45 | Haem peroxidase family protein |
| Os03g0386500 | UP | OsTPP9 | Similar to Trehalose-6-phosphate phosphatase |
| Os03g0389700 | UP | OsDAHPS 1 | 3-Deoxy-D-arabino-heptulosonate 7-phosphate synthase, Chorismate biosyn-thesi |
| Os03g0402800 | UP | OsJAZ5 | Tify domain containing protein |
| Os03g0404800 | UP | - | NAD(P)-binding domain containing protein |
| Os03g0405500 | UP | - | Similar to PDI-like protein |
| Os03g0412300 | UP | - | Heavy metal transport/detoxification protein domain containing protein |
| Os03g0413100 | UP | OsACR7 | Similar to ACR4 |
| Os03g0416200 | UP | BC1 | BRITTLE CULM1 |
| Os03g0431600 | DOWN | - | Hypothetical conserved gene |
| Os03g0567100 | UP | - | Conserved hypothetical protein |
| Os03g0620400 | DOWN | - | Hypothetical conserved gene |
| Os03g0629800 | UP | - | Conserved hypothetical protein |
| Os03g0646100 | UP | FtsZ2-1 | Similar to Plastid division protein ftsZ1 precursor |
| Os03g0658800 | UP | Os-CYP87C2 | Cytochrome P450 family protein |
| Os03g0703100 | UP | Os3bglu8 | Similar to Beta-glucosidase |

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|---|---|---|---|
| Os03g0713600 | UP | - | Aldo/keto reductase domain containing protein |
| Os03g0722500 | UP | - | Glycoside hydrolase, family 17 protein |
| Os03g0730500 | UP | OsSCP20 | Peptidase S10, serine carboxypeptidase family protein |
| Os03g0739500 | UP | - | Conserved hypothetical protein |
| Os03g0740833 | UP | - | Conserved hypothetical protein |
| Os03g0751600 | UP | - | Similar to Circumsporozoite protein |
| Os03g0757900 | UP | - | Similar to UDP-glucose 6-dehydrogenase (EC 1.1.1.22) (UDP-Glc dehydrogenase) (UDP-GlcDH) (UDPGDH) |
| Os03g0761000 | UP | - | SWIB/MDM2 domain containing protein |
| Os03g0788200 | UP | - | MD-2-related lipid-recognition domain containing protein |
| Os03g0790500 | UP | GID1 | Alpha/beta hydrolase fold-3 domain containing protein |
| Os03g0793800 | UP | OsLTPG7 | Plant lipid transfer protein and hydrophobic protein, helical domain containing protein |
| Os03g0802500 | UP | - | ATPase, AAA-type, core domain containing protein |
| Os03g0806800 | UP | - | Conserved hypothetical protein |
| Os03g0815200 | UP | - | Similar to Methylenetetrahydrofolate reductase (EC 1.5.1.20) |
| Os03g0817800 | UP | OsTBL6 | Protein of unknown function DUF231 domain containing protein |
| Os03g0831700 | UP | - | Conserved hypothetical protein |
| Os03g0837100 | UP | OsCesA5 | Similar to Cellulose synthase-6 |
| Os03g0852400 | UP | OsAGP31 | Conserved hypothetical protein |
| Os03g0859900 | UP | - | Protein of unknown function DUF547 domain containing protein |
| Os04g0103700 | DOWN | - | Serine/threonine protein kinase-related domain containing protein |
| Os04g0116600 | UP | - | Glucose/ribitol dehydrogenase family protein |
| Os04g0142400 | UP | - | Conserved hypothetical protein |
| Os04g0154800 | UP | - | Protein of unknown function DUF594 family protein |
| Os04g0168300 | UP | - | Conserved hypothetical protein |
| Os04g0203450 | UP | - | Hypothetical protein |
| Os04g0243700 | UP | OsCTR1 | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os04g0271450 | DOWN | - | Non-protein coding transcript |
| Os04g0282400 | DOWN | - | Similar to FPF1 protein-like (RAA1) |
| Os04g0344100 | UP | - | Similar to OSIGBa0106G08.3 protein |
| Os04g0383700 | UP | OsRALF-16 | Conserved hypothetical protein |
| Os04g0387000 | DOWN | - | Hypothetical conserved gene |
| Os04g0396500 | UP | LAX2 | Regulation of axillary meristem formatio |
| Os04g0399300 | DOWN | - | Similar to Nudix hydrolase 13, mitochondrial precursor (EC 3.6.1.-) (AtNUDT13) |
| Os04g0401000 | UP | PI21 | Proline-rich protein, Blast resistanc |
| Os04g0401100 | UP | - | Similar to OSIGBa0113L04.8 protein |
| Os04g0406600 | UP | - | Prephenate dehydratase domain containing protein |
| Os04g0412900 | UP | - | Zinc finger, Sec23/Sec24-type domain containing protein |

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|---|---|---|---|
| Os04g0416700 | UP | - | Harpin-induced 1 domain containing protein |
| Os04g0439600 | UP | OsCRR1 | Regulator of chromosome condensation/beta-lactamase-inhibitor protein II domain containing protein |
| Os04g0447100 | UP | SPH | Similar to Lipoxygenase |
| Os04g0482300 | UP | - | Kelch related domain containing protein |
| Os04g0497000 | UP | Os-NADPH1 | Similar to Allyl alcohol dehydrogenase |
| Os04g0499200 | UP | - | Enhancer of rudimentary family protein |
| Os04g0514800 | UP | - | Similar to Dual specificity kinase 1 |
| Os04g0538400 | UP | - | Similar to Nodulin 21 (N-21) |
| Os04g0550200 | UP | OsERF | - |
| Os04g0554200 | UP | - | Similar to OSIGBa0143N19.13 protein |
| Os04g0567800 | UP | OsDof18 | Similar to OSIGBa0103M18.3 protein |
| Os04g0569900 | UP | - | IQ calmodulin-binding region domain containing protein |
| Os04g0577800 | UP | - | Uncharacterised protein family UPF0136, Transmembrane domain containing protein |
| Os04g0578600 | DOWN | OsFRO2 | Similar to H0404F02.15 protein |
| Os04g0583200 | DOWN | - | Conserved hypothetical protein |
| Os04g0589400 | UP | - | Conserved hypothetical protein |
| Os04g0593400 | UP | - | Similar to OSIGBa0142I02-OSIGBa0101B20.20 protein |
| Os04g0597600 | UP | OsPTR5 | TGF-beta receptor, type I/II extracellular region family protein |
| Os04g0600900 | UP | GRF3 | Similar to B0403H10-OSIGBa0105A11.9 protein |
| Os04g0606000 | UP | - | Transferase family protein |
| Os04g0634800 | DOWN | - | Similar to H0315F07.8 protein |
| Os04g0640700 | UP | - | Similar to Alpha-L-arabinofuranosidase/beta-D-xylosidase isoenzyme ARA-I |
| Os04g0654500 | UP | - | Conserved hypothetical protein |
| Os04g0671200 | UP | PAO4 | Polyamine oxidase, Seed germinatio |
| Os04g0677700 | UP | OsKTN80b | Katanin P80 ortholog, Katanin regulatory subunit P80 |
| Os04g0685900 | UP | OsRLCK174 | Similar to Receptor-like protein kinase-like protein (Fragment) |
| Os04g0689500 | UP | - | Similar to H0814G11.12 protein |
| Os04g0690100 | UP | - | Zinc finger, C2H2-type domain containing protein |
| Os05g0103000 | UP | OsbHLH083 | Similar to MYC1 |
| Os05g0114000 | UP | - | Similar to PRLI-interacting factor F (Fragment) |
| Os05g0119850 | UP | - | Hypothetical protein |
| Os05g0130300 | UP | - | Conserved hypothetical protein |
| Os05g0130600 | UP | - | Conserved hypothetical protein |
| Os05g0159300 | UP | OsGELP62 | Similar to Alpha-L-fucosidase 2 |
| Os05g0163300 | UP | OsFLA9 | Similar to Arabinogalactan protein-like |

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|---|---|---|---|
| Os05g0176100 | UP | OsCesA1 | Similar to Cellulose synthase BoCesA1 |
| Os05g0189300 | UP | - | Vegetative storage protein/acid phosphatase domain containing protein |
| Os05g0190300 | UP | - | Acid phosphatase (Class B) family protein |
| Os05g0190500 | UP | OsVSP2 | Similar to Acid phosphatase |
| Os05g0191500 | UP | - | Similar to stem 28 kDa glycoprotein |
| Os05g0199100 | UP | - | Similar to NDR1/HIN1-Like protein 2 |
| Os05g0210600 | UP | - | Molecular chaperone, heat shock protein, Hsp40, DnaJ domain containing protein |
| Os05g0211100 | UP | CYP51G3 | Similar to Cytochrome P450-like protein |
| Os05g0273800 | UP | - | Similar to Soluble epoxide hydrolase |
| Os05g0320700 | UP | C4H2 | Similar to Cytochrome P450 |
| Os05g0350900 | UP | - | Hypothetical conserved gene |
| Os05g0353500 | UP | - | Similar to ATP binding protein |
| Os05g0361700 | UP | OsERF | - |
| Os05g0368000 | UP | RH1 | Non-protein coding transcript |
| Os05g0386700 | UP | - | Zinc finger, C2H2-type domain containing protein |
| Os05g0402900 | UP | OsBphi262 | Similar to EDGP |
| Os05g0406300 | UP | - | Hypothetical protein |
| Os05g0410200 | UP | Hsr203j | Alpha/beta hydrolase fold-3 domain containing protein |
| Os05g0427900 | UP | - | Similar to DnaJ-like protein |
| Os05g0428100 | UP | OsBgal6 | Similar to Beta-galactosidase |
| Os05g0456300 | UP | AKR4C15 | Aldose reductase |
| Os05g0462000 | DOWN | - | Similar to plant-specific domain TIGR01589 family protein |
| Os05g0462500 | UP | - | Transmembrane receptor, eukaryota domain containing protein |
| Os05g0480400 | UP | - | Serine/threonine protein kinase domain containing protein |
| Os05g0497200 | UP | ERF130 | AP2/ERF (APETALA2/ethylene-responsive factor) protein, Regulation of spikelet meristem determinancy and floral organ identity |
| Os05g0499800 | UP | UGT705A3 | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os05g0501001 | UP | - | Hypothetical gene |
| Os05g0514400 | UP | - | Hypothetical conserved gene |
| Os05g0522600 | UP | - | Leucine-rich repeat, plant specific containing protein |
| Os05g0535900 | UP | - | IQ calmodulin-binding region domain containing protein |
| Os05g0550800 | UP | - | Serine/threonine protein kinase domain containing protein |
| Os05g0566400 | UP | OsMPK7 | Similar to Blast and wounding induced mitogen-activated protein kinase |
| Os05g0576600 | UP | - | Conserved hypothetical protein |
| Os05g0585400 | UP | - | Similar to Protein ABIL1 |
| Os06g0109300 | UP | - | Protein of unknown function DUF6, transmembrane domain containing protein |
| Os06g0117101 | UP | - | Hypothetical gene |
| Os06g0123000 | UP | - | Conserved hypothetical protein |

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|---|---|---|---|
| Os06g0127100 | UP | OsDREB1C | Dehydration-responsive element-binding protein 1C |
| Os06g0131700 | UP | ONAC007 | Similar to NAM protein |
| Os06g0143400 | UP | FATB1 | Similar to Acyl-ACP thioesterase (Fragment) |
| Os06g0147100 | DOWN | - | Similar to cDNA clone:J023088C01, full insert sequence |
| Os06g0163300 | UP | - | Harpin-induced 1 domain containing protein |
| Os06g0203200 | UP | - | Flavin-containing monooxygenase FMO family protein |
| Os06g0203600 | UP | CHI2 | Chalcone isomerase domain containing protein |
| Os06g0223800 | UP | CSIL1 | C2 calcium-dependent membrane targeting domain containing protein |
| Os06g0247900 | UP | OsGH9B9 | Similar to Endo-beta-1,4-glucanase precursor (EC 3.2.1.4) |
| Os06g0270200 | UP | OsHAK24 | Similar to Potassium transporter 24 |
| Os06g0284200 | UP | - | Protein of unknown function DUF246, plant family protein |
| Os06g0318500 | UP | OsNHX4 | Similar to Sodium/hydrogen exchanger |
| Os06g0529900 | UP | - | Hypothetical conserved gene |
| Os06g0538400 | UP | - | Conserved hypothetical protein |
| Os06g0559400 | DOWN | - | Conserved hypothetical protein |
| Os06g0566500 | UP | - | Hypothetical conserved gene |
| Os06g0573600 | UP | OsBgal2 | Similar to Beta-galactosidase precursor (EC 3.2.1.23) (Lactase) |
| Os06g0579200 | DOWN | OsLCT1 | Low-affinity cation transporter, Regulation of cadmium transport to the grain |
| Os06g0589500 | UP | - | Conserved hypothetical protein |
| Os06g0594600 | UP | OsAT10 | BAHD acyltransferase, Glucuronoarabinoxylan modification in grass cell wal |
| Os06g0595900 | UP | LC3 | SPOC domain-containing protein, Regulator of leaf inclinatio |
| Os06g0598800 | UP | WSL1 | Similar to Fatty acid elongase 1-like protein |
| Os06g0671000 | UP | OsHAK13 | Similar to Potassium transporter 1 (AtPOT1) (AtKUP1) (AtKT1) |
| Os06g0678500 | DOWN | - | Hypothetical conserved gene |
| Os06g0707200 | UP | - | Glycosyltransferase AER61, uncharacterized domain containing protein |
| Os06g0725200 | UP | OsGELP90 | Lipase, GDSL domain containing protein |
| Os06g0730150 | UP | - | Hypothetical protein |
| Os07g0116600 | DOWN | - | Similar to HLS1 (HOOKLESS 1); N-acetyltransferase |
| Os07g0121000 | UP | - | Protein of unknown function DUF1719, Oryza sativa family protein |
| Os07g0121750 | UP | - | Conserved hypothetical protein |
| Os07g0122100 | UP | - | Protein of unknown function DUF1719, Oryza sativa family protein |
| Os07g0134200 | UP | OsRLCK222 | Receptor-like protein kinase 3 |
| Os07g0148800 | UP | - | Conserved hypothetical protein |
| Os07g0192000 | UP | - | ATPase, AAA-type, core domain containing protein |
| Os07g0194800 | UP | - | Similar to galactosyltransferase/ transferase, transferring hexosyl groups |
| Os07g0208500 | UP | OsCesA8 | Similar to Cellulose synthase-4 |
| Os07g0209100 | DOWN | - | Similar to Seed imbibition protein (Fragment) |
| Os07g0241500 | UP | OsUGT710C2 | UDP-glucuronosyl/UDP-glucosyltransferase family protein |

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|---|---|---|---|
| Os07g0241600 | UP | - | UDP-glucuronosyl/UDP-glucosyltransferase domain containing protein |
| Os07g0252400 | UP | OsCesA6 | Similar to Cellulose synthase-8 |
| Os07g0274700 | UP | - | HvB12D protein (B12Dg1 protein) |
| Os07g0413800 | UP | - | Conserved hypothetical protein |
| Os07g0414000 | UP | - | Transferase domain containing protein |
| Os07g0418700 | UP | OsRePRP2.1 | Proline-rich glycoprotein, ABA-dependent inhibition of root growt |
| Os07g0450100 | UP | - | Hypothetical conserved gene |
| Os07g0457200 | UP | - | Hypothetical protein |
| Os07g0490100 | UP | UGT709A4 | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os07g0490500 | UP | - | Xanthine/uracil/vitamin C permease family protein |
| Os07g0523965 | UP | - | Similar to Glucose-6-phosphate/phosphate-translocator precursor |
| Os07g0526400 | UP | OsPKS15 | Polyketide synthase, type III domain containing protein |
| Os07g0526600 | UP | - | Alpha/beta hydrolase fold-3 domain containing protein |
| Os07g0550900 | UP | - | Similar to Receptor-like protein kinase 6 |
| Os07g0560400 | UP | - | Hypothetical protein |
| Os07g0564500 | UP | - | Pyridine nucleotide-disulphide oxidoreductase, NAD-binding region domain containing protein |
| Os07g0569800 | UP | - | Similar to protein kinase |
| Os07g0572400 | UP | - | Conserved hypothetical protein |
| Os07g0597200 | UP | - | Protein kinase, core domain containing protein |
| Os07g0598000 | UP | - | Similar to NADPH HC toxin reductase (Fragment) |
| Os07g0601600 | UP | - | Similar to VEP1 (VEIN PATTERNING 1); binding / catalytic |
| Os07g0615200 | UP | OsJAZ6 | Tify domain containing protein |
| Os07g0622000 | UP | SAPK2 | Serine/threonine protein kinase, Hyperosmotic stress response, Abscisic acid (ABA)-dependent gene regulatio |
| Os07g0622200 | UP | OsDAHP1 | 3-Deoxy-D-arabino-heptulosonate 7-phosphate synthase, Chorismate biosynthesi |
| Os07g0628500 | UP | OsbHLH1 | Basic helix-loop-helix dimerisation region bHLH domain containing protein |
| Os07g0633600 | UP | - | Similar to SUB1; calcium ion binding |
| Os07g0635500 | UP | Os-CYP709C5 | Similar to Cytochrome P450 |
| Os07g0656200 | DOWN | Os7bglu26 | Similar to Beta-glucosidase 26 |
| Os07g0674400 | UP | - | Pollen Ole e 1 allergen/extensin domain containing protein |
| Os07g0683900 | UP | - | Ricin B-related lectin domain containing protein |
| Os07g0685500 | UP | - | Alpha/beta hydrolase family protein |
| Os07g0686300 | DOWN | - | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os08g0103100 | UP | - | Hypothetical protein |
| Os08g0137800 | UP | OsUCL24 | Cupredoxin domain containing protein |

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|---|---|---|---|
| Os08g0140300 | UP | TDC1 | Aromatic L-amino acid decarboxylase (AADC), Senescence-induced serotonin biosynthesis |
| Os08g0140700 | UP | PR5 | Similar to CsAtPR5 |
| Os08g0141400 | UP | - | Similar to mRNA, clone: RTFL01-03-I20 |
| Os08g0150600 | DOWN | - | F-box domain, cyclin-like domain containing protein |
| Os08g0168000 | UP | OsTPS31 | Similar to Sesquiterpene synthase |
| Os08g0200750 | DOWN | - | Hypothetical protein |
| Os08g0238200 | UP | - | Dienelactone hydrolase domain containing protein |
| Os08g0249000 | UP | OsBBX25 | Zinc finger, B-box domain containing protein |
| Os08g0280600 | UP | - | Reticulon domain containing protein |
| Os08g0356700 | UP | - | Protein of unknown function DUF247, plant family protein |
| Os08g0374600 | UP | OsRLCK253 | Similar to Receptor kinase-like protein |
| Os08g0384500 | UP | OsA-BCG44 | ABC transporter-like domain containing protein |
| Os08g0410950 | UP | - | Hypothetical conserved gene |
| Os08g0417000 | UP | - | 2OG-Fe(II) oxygenase domain containing protein |
| Os08g0434300 | UP | MDH | Similar to Malate dehydrogenase precursor (EC 1.1.1.37) |
| Os08g0441500 | UP | OsCCR | Cinnamoyl-CoA reductase, Lignin formatio |
| Os08g0453200 | DOWN | - | Similar to Auxin-repressed protein |
| Os08g0460600 | DOWN | OsCKX11 | Similar to Cytokinin dehydrogenase 11 |
| Os08g0474000 | UP | DERF3 | Similar to AP2 domain containing protein RAP2.6 (Fragment) |
| Os08g0489300 | UP | TagI | Methyladenine glycosylase domain containing protein |
| Os08g0490000 | UP | OsbHLH031 | Helix-loop-helix DNA-binding domain containing protein |
| Os08g0498400 | UP | ROMT-17 | Similar to Caffeoyl-CoA 3-O-methyltransferase (Fragment) |
| Os08g0514033 | UP | - | Hypothetical protein |
| Os08g0520000 | UP | BTI-1 | Mitochondrial substrate carrier family protein |
| Os08g0526200 | UP | - | Conserved hypothetical protein |
| Os08g0531100 | UP | - | MAP65/ASE1 family protein |
| Os08g0532200 | UP | GSA | Similar to Glutamate-1-semialdehyde 2,1-aminomutase, chloroplast precursor (EC 5.4.3.8) (GSA) (Glutamate-1-semialdehyde aminotransferase) (GSA- AT) |
| Os08g0542700 | UP | - | Ankyrin repeat containing protein |
| Os08g0549000 | DOWN | OsGL1A | R2R3 MYB transcription factor, Homologue of Arabidopsis transcription factor GL |
| Os08g0560300 | UP | - | Protein of unknown function DUF597 family protein |
| Os09g0106700 | UP | R2R3-MYB | Similar to Myb proto-oncogene protein (C-myb) |
| Os09g0249400 | UP | - | Uncharacterised protein family UPF0497, trans-membrane plant domain containing protein |

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|---|---|---|---|
| Os09g0255400 | UP | IGPS | Similar to Indole-3-glycerol phosphate synthase, chloroplast precursor (EC 4.1.1.48) (IGPS) |
| Os09g0268100 | DOWN | - | Similar to lectin-like receptor kinase 7 |
| Os09g0322400 | DOWN | - | Proteolipid membrane potential modulator domain containing protein |
| Os09g0322500 | DOWN | - | Hypothetical conserved gene |
| Os09g0343600 | DOWN | - | Non-protein coding transcript |
| Os09g0380600 | UP | - | Protein of unknown function DUF295 domain containing protein |
| Os09g0419200 | UP | OsCCR19 | NAD(P)-binding domain containing protein |
| Os09g0420300 | UP | - | Methyladenine glycosylase domain containing protein |
| Os09g0426800 | UP | WSL2 | Homologue of WAX2/GL1, Synthesis of leaf cuticular wax |
| Os09g0441400 | UP | - | Similar to Elicitor-inducible cytochrome P450 |
| Os09g0442100 | UP | OsRLCK272 | Protein kinase, core domain containing protein |
| Os09g0450300 | UP | - | MAP65/ASE1 family protein |
| Os09g0456800 | UP | HSFB1 | Similar to Heat stress transcription factor Spl7 (Heat shock transcription factor) (Heat shock factor RHSF10) |
| Os09g0471200 | UP | - | Similar to WAK80 - OsWAK receptor-like protein kinase |
| Os09g0494200 | UP | BC15 | Membrane-associated chitinase-like protein, Cellulose biosynthesi |
| Os09g0502500 | UP | - | Alcohol dehydrogenase superfamily, zinc-containing protein |
| Os09g0511900 | UP | Os9bglu33 | Similar to Beta-glucosidase 32 |
| Os09g0524800 | UP | OsBAG1 | Apoptosis regulator Bcl-2 protein, BAG domain containing protein |
| Os09g0533900 | UP | OsGH9B5 | Similar to CEL5=CELLULASE 5 (Fragment) |
| Os09g0545300 | DOWN | SAUR39 | SAUR family protein, Negative regulator of auxin synthesis and transpor |
| Os09g0556700 | UP | OsSET37 | SET domain domain containing protein |
| Os09g0562600 | UP | WAK92 | Wall-associated kinase, Positive regulation of rice blast resistanc |
| Os10g0127900 | UP | OsFbx352 | Similar to F-box domain containing protein, expressed |
| Os10g0144700 | UP | - | Cytochrome P450 domain containing protein |
| Os10g0170000 | UP | - | Nucleotide-sensitive chloride conductance regulator family protein |
| Os10g0181100 | DOWN | - | Conserved hypothetical protein |
| Os10g0195250 | DOWN | - | Conserved hypothetical protein |
| Os10g0392400 | UP | Os-TIFY11d | Tify domain containing protein |
| Os10g0461100 | UP | - | Similar to Keratin, type II cytoskeletal 1 (Cytokeratin 1) (K1) (CK 1) (67 kDa cytokeratin) (Hair alpha protein) |
| Os10g0468500 | UP | - | Serine/threonine protein kinase-related domain containing protein |
| Os10g0469600 | UP | - | Similar to Leucine Rich Repeat family protein, expressed |
| Os10g0478100 | UP | - | Heat shock protein DnaJ, N-terminal domain containing protein |
| Os10g0503250 | UP | - | Hypothetical protein |
| Os10g0512800 | UP | OsRF-PHC-10 | Similar to predicted protein |

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|---|---|---|---|
| Os10g0516200 | UP | OsRLCK303 | Serine/threonine protein kinase domain containing protein |
| Os10g0517500 | UP | RRJ1 | Cys/Met metabolism, pyridoxal phosphate-dependent enzyme domain containing protein |
| Os10g0532600 | UP | OsOFP17 | Protein of unknown function DUF623, plant domain containing protein |
| Os10g0533150 | UP | - | Similar to BRASSINOSTEROID INSENSITIVE 1-associated receptor kinase 1 |
| Os10g0534700 | UP | - | Protein of unknown function DUF604 family protein |
| Os10g0536400 | UP | OsF3H-2 | Similar to Oxidoreductase, 2OG-Fe oxygenase family protein, expressed |
| Os10g0537800 | UP | - | Peptidase aspartic, catalytic domain containing protein |
| Os10g0575000 | UP | OsbHLH009 | JAZ-interacting transcription factor, Positive regulator of jasmonate (JA) signaling pathway, Bacterial blight resistance, Spikelet developmen |
| Os10g0577600 | UP | JMJ706 | H3K9 demethylase, Floral organ developmen |
| Os10g0580900 | UP | - | Conserved hypothetical protein |
| Os11g0100600 | UP | - | Alpha/beta hydrolase family protein |
| Os11g0108800 | UP | - | Similar to Protein kinase domain containing protein, expressed |
| Os11g0109700 | UP | - | Protein of unknown function Cys-rich family protein |
| Os11g0116400 | UP | - | Similar to Elongation factor P (EF-P) |
| Os11g0155100 | UP | OsFbox568 | Similar to F-box domain containing protein |
| Os11g0178800 | UP | - | Plant disease resistance response protein family protein |
| Os11g0180000 | UP | - | Plant disease resistance response protein family protein |
| Os11g0246166 | DOWN | - | Hypothetical protein |
| Os11g0249300 | UP | - | Conserved hypothetical protein |
| Os11g0257800 | DOWN | - | Hypothetical protein |
| Os11g0275200 | UP | - | Similar to Endo-1,3;1,4-beta-D-glucanase precursor (EC 3.2.1.-) |
| Os11g0275500 | UP | - | Similar to Endo-1,3;1,4-beta-D-glucanase precursor (EC 3.2.1.-) |
| Os11g0444700 | DOWN | OsPB1 | Octicosapeptide/Phox/Bem1p domain containing protein |
| Os11g0444900 | DOWN | - | Octicosapeptide/Phox/Bem1p domain containing protein |
| Os11g0448700 | UP | OsRALF-31 | Conserved hypothetical protein |
| Os11g0455800 | UP | OsSHM2 | Similar to Serine hydroxymethyltransferase |
| Os11g0482901 | UP | - | Hypothetical gene |
| Os11g0496500 | UP | - | Similar to AT.I.24-5 protein (Fragment) |
| Os11g0531700 | UP | - | NUDIX hydrolase domain containing protein |
| Os11g0536000 | UP | - | Non-protein coding transcript |
| Os11g0566800 | UP | OsPKS27 | Similar to Bibenzyl synthase (EC 2.3.1.-) |
| Os11g0569300 | DOWN | - | Serine/threonine protein kinase domain containing protein |
| Os11g0592600 | UP | - | Targeting for Xklp2 family protein |
| Os11g0619800 | UP | - | Kelch related domain containing protein |
| Os11g0629400 | UP | - | Similar to Nitrilase associated protein-like |
| Os11g0644700 | UP | - | Plant disease resistance response protein family protein |

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|---|---|---|---|
| Os11g0645400 | UP | - | Plant disease resistance response protein family protein |
| Os11g0671100 | DOWN | - | Hypothetical protein |
| Os11g0674400 | UP | - | Similar to NB-ARC domain containing protein, expressed |
| Os11g0701700 | UP | - | Hypothetical gene |
| Os12g0106300 | UP | OsTBL1 | Xylan acetyltransferase, Resistance to bacterial leaf blight diseas |
| Os12g0108100 | UP | - | Similar to Ser Thr specific protein kinase-like protein |
| Os12g0115900 | UP | - | Translation elongation factor P domain containing protein |
| Os12g0149900 | UP | - | IQ calmodulin-binding region domain containing protein |
| Os12g0152100 | UP | - | Alpha/beta hydrolase fold-1 domain containing protein |
| Os12g0174200 | UP | - | Conserved hypothetical protein |
| Os12g0182500 | UP | - | Conserved hypothetical protein |
| Os12g0190400 | UP | - | Similar to NifS-like protein |
| Os12g0225900 | UP | - | Allyl alcohol dehydrogenase |
| Os12g0443000 | UP | - | Similar to Cytochrome P450 family protein, expressed |
| Os12g0443500 | UP | - | Similar to UDP-glucose 6-dehydrogenase (EC 1.1.1.22) (UDP-Glc dehydrogenase) (UDP-GlcDH) (UDPGDH) |
| Os12g0485150 | UP | - | Conserved hypothetical protein |
| Os12g0530100 | UP | PRX138 | Similar to Peroxidase 24 precursor (EC 1.11.1.7) (Atperox P24) (ATP47) |
| Os12g0548300 | UP | OsNDPK2 | Nucleoside diphosphate kinase, Regulation of chloroplast development and chlorophyll biosynthesis, Abiotic stress response (ABA and salinity |
| Os12g0573600 | UP | - | Similar to predicted protein |
| Os12g0604300 | UP | - | Hypothetical gene |
| Os12g0616400 | UP | OsPCF8 | Similar to Isoform 2 of Transcription factor PCF8 |
| Os12g0624800 | DOWN | - | Conserved hypothetical protein |
| Os12g0629300 | UP | - | Similar to Thaumatin-like protein |
| Os12g0635400 | UP | - | VQ domain containing protein |
| **Specific DEGs in B3_vs_A3 comparing B1_vs_A1, B2_vs_A2 and B3_vs_A3** | | | |
| **Gene ID** | **up/down** | **Gene name** | **Description** |
| ENSRNA049471366 | UP | MIR159 | microRNA MIR159 |
| ENSRNA049475944 | UP | LSU_rRNA_eukarya | Eukaryotic large subunit ribosomal RNA |
| ENSRNA049476502 | UP | 5_8S_rRNA | 5.8S ribosomal RNA |
| Os01g0110200 | UP | OsAGP12 | Conserved hypothetical protein |
| Os01g0110400 | UP | - | Similar to Acetyl-CoA C-acetyltransferase |
| Os01g0112600 | DOWN | - | Conserved hypothetical protein |
| Os01g0113200 | DOWN | OsRLCK2 | Similar to Receptor serine/threonine kinase |
| Os01g0114550 | UP | - | Non-protein coding transcript |

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|---|---|---|---|
| Os01g0115600 | DOWN | OsRLCK11 | Similar to LRK14 |
| Os01g0117100 | DOWN | - | Similar to Receptor kinase LRK10 |
| Os01g0117300 | DOWN | OsRLCK17 | Similar to Receptor kinase LRK10 |
| Os01g0117700 | DOWN | - | Similar to LRK14 |
| Os01g0118066 | DOWN | - | Non-protein coding transcript |
| Os01g0123700 | UP | - | Zinc finger, RING-type domain containing protein |
| Os01g0124900 | DOWN | - | Seven-in-absentia protein, sina domain containing protein |
| Os01g0127400 | DOWN | - | Protein of unknown function DUF3326 domain containing protein |
| Os01g0127600 | UP | - | Similar to Bowman-Birk type proteinase inhibitor D-II precursor (IV) |
| Os01g0132000 | UP | IAI2 | Similar to Wound-induced protease inhibitor (WIP1) |
| Os01g0134500 | DOWN | OsSTE1 | Similar to Delta-7-sterol-C5(6)-desaturase (EC 1.3.3.-) (Delta-7-C-5 sterol desaturase) (Delta7-sterol-C5-desaturase) |
| Os01g0134700 | DOWN | - | Calmodulin binding protein-like family protein |
| Os01g0136450 | DOWN | - | Conserved hypothetical protein |
| Os01g0137700 | DOWN | - | Conserved hypothetical protein |
| Os01g0137800 | DOWN | - | Non-protein coding transcript |
| Os01g0138900 | UP | - | Mandelate racemase/muconate lactonizing enzyme family protein |
| Os01g0141700 | DOWN | OsWD40-2 | Similar to predicted protein |
| Os01g0142100 | DOWN | - | Peptidase M50 family protein |
| Os01g0143300 | UP | - | Similar to Glycine-rich protein (Fragment) |
| Os01g0144000 | UP | - | Conserved hypothetical protein |
| Os01g0147900 | UP | OsTPI1 | Triosephosphate isomerase, Glycolytic enzyme, Key component in XA3/XA26-mediated resistance to Xo |
| Os01g0148000 | DOWN | - | Similar to predicted protein |
| Os01g0150700 | DOWN | - | Hypothetical conserved gene |
| Os01g0152951 | DOWN | - | Hypothetical conserved gene |
| Os01g0154000 | DOWN | - | Conserved hypothetical protein |
| Os01g0160100 | UP | - | Similar to Pyruvate decarboxylase isozyme 2 (EC 4.1.1.1) (PDC) (Fragment) |
| Os01g0161300 | DOWN | - | Hypothetical conserved gene |
| Os01g0162001 | DOWN | - | Hypothetical gene |
| Os01g0162200 | DOWN | - | Leucine-rich repeat domain containing protein |
| Os01g0166800 | DOWN | - | Similar to ETG1 (E2F TARGET GENE 1) |
| Os01g0168800 | UP | - | Alpha/beta hydrolase fold-1 domain containing protein |
| Os01g0173000 | DOWN | - | Putative thiol-disulphide oxidoreductase DCC domain containing protein |
| Os01g0178400 | DOWN | - | Similar to Protein phosphatase 2A B'kappa subunit |
| Os01g0179800 | DOWN | - | TMS membrane protein/tumour differentially expressed protein family protein |
| Os01g0180300 | DOWN | - | Lipoprotein, type 6 family protein |

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|---|---|---|---|
| Os01g0180800 | UP | - | Heat shock protein Hsp70 family protein |
| Os01g0188200 | DOWN | - | Endonuclease/exonuclease/phosphatase domain containing protein |
| Os01g0188900 | DOWN | - | Conserved hypothetical protein |
| Os01g0192000 | DOWN | - | Similar to Ankyrin-like protein-like protein |
| Os01g0192550 | UP | DOS | CCCH-type zinc finger protein, Negative regulator for leaf senescenc |
| Os01g0195300 | DOWN | - | Conserved hypothetical protein |
| Os01g0197350 | DOWN | - | Hypothetical conserved gene |
| Os01g0198500 | UP | - | Hypothetical genes |
| Os01g0205200 | DOWN | - | Conserved hypothetical protein |
| Os01g0205500 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os01g0208000 | UP | - | Similar to 60S ribosomal protein L11-2 (L16). Splice isoform 2 |
| Os01g0210900 | UP | OsUMA-MIT4 | Protein of unknown function DUF6, transmembrane domain containing protein |
| Os01g0215750 | UP | - | Cytochrome P450 family protein |
| Os01g0216000 | UP | - | Hypothetical gene |
| Os01g0217500 | DOWN | OsGELP7 | Lipase, GDSL domain containing protein |
| Os01g0218100 | UP | OsDJ-1A | ThiJ/PfpI domain containing protein |
| Os01g0223200 | UP | OsbHLH037 | Helix-loop-helix DNA-binding domain containing protein |
| Os01g0225550 | UP | OsGELP12 | Lipase, GDSL domain containing protein |
| Os01g0226300 | UP | - | Hypothetical gene |
| Os01g0226600 | UP | - | Reticulon family protein |
| Os01g0227800 | DOWN | SLAC | Similar to C4-dicarboxylate transporter/malic acid transport protein |
| Os01g0229900 | DOWN | - | Similar to cDNA, clone: J075083L18, full insert sequence |
| Os01g0231700 | UP | - | Similar to Ubiquitin-conjugating enzyme family protein, expressed |
| Os01g0231800 | UP | - | Similar to 60S acidic ribosomal protein P2-B (CaRP2B) |
| Os01g0234001 | DOWN | - | Similar to cDNA clone:J033025F17, full insert sequence |
| Os01g0236900 | DOWN | - | Hypothetical conserved gene |
| Os01g0239200 | DOWN | - | Hypothetical protein |
| Os01g0242300 | UP | OsTPT1 | Similar to Phophate translocator (Fragment) |
| Os01g0257100 | UP | - | Optic atrophy 3 family protein |
| Os01g0260500 | DOWN | OsRALF-5 | Rapid ALkalinization Factor family protein |
| Os01g0262700 | DOWN | - | Hypothetical conserved gene |
| Os01g0268300 | DOWN | - | Similar to predicted protein |
| Os01g0272600 | UP | - | Similar to DNA gyrase B subunit |
| Os01g0274100 | UP | OsRDN | Similar to Root determined nodulation 1 |
| Os01g0274800 | UP | OsYUCCA10 | Similar to disulfide oxidoreductase/ monooxygenase/ oxidoreductase |
| Os01g0276700 | UP | CSA | R2R3-type MYB transcription factor, Sugar partitioning into anthe |
| Os01g0277500 | DOWN | - | Similar to Pyruvate kinase, cytosolic isozyme (EC 2.7.1.40) (PK) |
| Os01g0278000 | DOWN | - | Conserved hypothetical protein |

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|---|---|---|---|
| Os01g0278050 | DOWN | OsDof4 | Dof (DNA binding with one finger) transcription factor, C2-C2 zinc finger transcription factor, Regulation of flowering tim |
| Os01g0279400 | DOWN | OsVQ1 | VQ domain containing protein |
| Os01g0281100 | UP | - | Hypothetical conserved gene |
| Os01g0283600 | UP | OsZIFL2 | Major facilitator superfamily antiporter |
| Os01g0283700 | UP | - | Conserved hypothetical protein |
| Os01g0286600 | DOWN | OsCCR4 | Similar to Cinnamoyl CoA reductase |
| Os01g0287400 | UP | OsCCR5 | Similar to Cinnamoyl-CoA reductase (EC 1.2.1.44) |
| Os01g0290650 | UP | PPX | Similar to Plastidal protoporphyrinogen oxidase |
| Os01g0290700 | UP | - | Similar to Hydrophobic protein LTI6A (Low temperature-induced protein 6A) |
| Os01g0290901 | DOWN | - | Non-protein coding transcript |
| Os01g0292700 | DOWN | OsABCB1 | Similar to CjMDR1 |
| Os01g0293000 | DOWN | - | Non-protein coding transcript |
| Os01g0296166 | UP | OsIF | Intermediate filament, Cytoskeleton protein, Tolerance to salinity and heat stres |
| Os01g0297200 | UP | OsSAMS3 | S-adenosyl-l-methionine synthetase, Histone H3K4me3 and DNA methylation, Regulation of gene expression related to flowerin |
| Os01g0301500 | DOWN | - | Hypothetical protein |
| Os01g0302100 | UP | - | ATPase, AAA-type, core domain containing protein |
| Os01g0306800 | DOWN | - | Pentatricopeptide repeat domain containing protein |
| Os01g0309800 | UP | - | Conserved hypothetical protein |
| Os01g0311100 | DOWN | - | Conserved hypothetical protein |
| Os01g0314100 | UP | - | Similar to Hydrogenase expression/formation protein hypB |
| Os01g0320700 | DOWN | OsRFPH2-4 | Similar to RING-H2 finger protein ATL2L |
| Os01g0321900 | DOWN | - | Catalytic domain of components of various dehydrogenase complexes containing protein |
| Os01g0323300 | DOWN | - | Hypothetical protein |
| Os01g0327100 | UP | - | Hypothetical conserved gene |
| Os01g0337100 | UP | - | Similar to Ser Thr specific protein kinase-like protein |
| Os01g0346250 | DOWN | - | RNA-binding, CRM domain domain containing protein |
| Os01g0348900 | UP | prx15 | Haem peroxidase family protein |
| Os01g0349600 | DOWN | OsTPS1 | Similar to Sesquiterpene synthase |
| Os01g0351200 | DOWN | - | Conserved hypothetical protein |
| Os01g0354700 | DOWN | OsJRL | Jacalin-related mannose-binding lectin, Salinity toleranc |
| Os01g0358100 | UP | - | Hypothetical protein |
| Os01g0362100 | DOWN | PARP2A | Similar to Poly |
| Os01g0364400 | DOWN | - | Pre-mRNA cleavage complex II Clp1 domain containing protein |
| Os01g0369700 | UP | OsRALF-6 | Rapid ALkalinization Factor family protein |
| Os01g0371200 | UP | - | Esterase/lipase/thioesterase domain containing protein |

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|---|---|---|---|
| Os01g0382450 | UP | OsRLCK35 | Protein kinase, catalytic domain domain containing protein |
| Os01g0384800 | DOWN | OsGSTF5 | Similar to Glutathione S-transferase GST 8 (EC 2.5.1.18) |
| Os01g0389700 | DOWN | OsOPR10 | Similar to 12-oxo-phytodienoic acid reductase6 |
| Os01g0505700 | UP | OsGSTF1 | Similar to Glutathione-S-transferase 19E50 |
| Os01g0510600 | DOWN | DHQDT/SDH | Similar to shikimate biosynthesis protein aroDE |
| Os01g0511100 | UP | - | Similar to Kinesin heavy chain (Fragment) |
| Os01g0520180 | DOWN | - | Conserved hypothetical protein |
| Os01g0520600 | UP | - | Protein of unknown function DUF679 family protein |
| Os01g0521250 | UP | - | Conserved hypothetical protein |
| Os01g0533900 | UP | OsFLU1 | Tetratricopeptide-like helical domain containing protein |
| Os01g0536000 | DOWN | - | UspA domain containing protein |
| Os01g0550600 | DOWN | - | Hypothetical conserved gene |
| Os01g0552000 | DOWN | - | NB-ARC domain containing protein |
| Os01g0557500 | DOWN | - | Non-protein coding transcript |
| Os01g0558850 | DOWN | OsABCB2 | Similar to Multidrug resistance protein 1 homolog |
| Os01g0559600 | DOWN | OsCIPK08 | Similar to CBL-interacting serine/threonine-protein kinase 24 (EC 2.7.1.37) (SNF1-related kinase 3.11) (SALT OVERLY SENSITIVE 2 protein) |
| Os01g0559900 | UP | - | Conserved hypothetical protein |
| Os01g0565900 | UP | - | Hypothetical conserved gene |
| Os01g0570800 | DOWN | SRZ3 | Similar to TATA-binding protein associated factor 2N (RNA-binding protein 56) (TAFII68) (TAF(II)68) |
| Os01g0575200 | DOWN | OsCAX1a | Cation/proton exchanger 1a |
| Os01g0579600 | DOWN | - | Similar to peptidase M16 family protein / insulinase family protein |
| Os01g0582600 | DOWN | OsVPE2 | Similar to C13 endopeptidase NP1 precursor |
| Os01g0588200 | UP | OsAGP14 | Non-protein coding transcript |
| Os01g0589000 | DOWN | - | Similar to Protein transport protein Sec61 beta subunit |
| Os01g0594800 | UP | - | IQ calmodulin-binding region domain containing protein |
| Os01g0595600 | UP | OsbHLH024 | Helix-loop-helix DNA-binding domain containing protein |
| Os01g0600000 | UP | OsCBL9 | Similar to Calcineurin B-like protein 9 |
| Os01g0600900 | DOWN | - | Phospholipase A2, active site domain containing protein |
| Os01g0607800 | DOWN | OSVDAC3 | Voltage-dependent anion channel |
| Os01g0611100 | UP | - | Nucleic acid-binding, OB-fold domain containing protein |
| Os01g0615100 | UP | - | Similar to D-amino acid oxidase |
| Os01g0615200 | UP | - | Alpha/beta hydrolase fold-1 domain containing protein |
| Os01g0618400 | DOWN | OsATL15 | Amino acid transporter, transmembrane domain containing protein |
| Os01g0626400 | UP | - | Similar to Copia-like retroelement pol polyprotein |

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|---|---|---|---|
| Os01g0627500 | UP | CAB2R | Chlorophyll a-b binding protein 2, chloroplast precursor (LHCII type I CAB-2) (LHCP) |
| Os01g0647000 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os01g0647200 | DOWN | OsRAN1 | Similar to GTP-binding nuclear protein Ran-2 |
| Os01g0650800 | DOWN | OCPI2 | Chymotrypsin protease inhibitor, Salt and osmotic stress toleranc |
| Os01g0652375 | DOWN | OsAT2 | Transferase family protein |
| Os01g0654500 | UP | OsRH25 | Similar to RNA helicase (Fragment) |
| Os01g0661500 | DOWN | WRKY11 | WRKY transcription factor, Control of flowering time and plant heigh |
| Os01g0675800 | DOWN | Os-CYP72A18 | Cytochrome P450 family protein |
| Os01g0676200 | DOWN | OsFbox031 | Cyclin-like F-box domain containing protein |
| Os01g0678000 | DOWN | - | Hypothetical conserved gene |
| Os01g0678100 | DOWN | - | Transposon, En/Spm-like domain containing protein |
| Os01g0681600 | DOWN | - | Hypothetical protein |
| Os01g0681800 | DOWN | - | Similar to NADP-isocitrate dehydrogenase |
| Os01g0686200 | DOWN | - | Mov34/MPN/PAD-1 family protein |
| Os01g0688200 | UP | ONAC014 | No apical meristem (NAM) protein domain containing protein |
| Os01g0696800 | DOWN | - | Conserved hypothetical protein |
| Os01g0702000 | DOWN | - | Protein of unknown function DUF2921 domain containing protein |
| Os01g0702450 | UP | - | Protein of unknown function DUF2921 domain containing protein |
| Os01g0704100 | DOWN | - | Hypothetical conserved gene |
| Os01g0705000 | DOWN | - | Conserved hypothetical protein |
| Os01g0706400 | DOWN | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os01g0706600 | UP | - | Similar to hydrolase, alpha/beta fold family protein |
| Os01g0708500 | UP | - | Peptidase A1 domain containing protein |
| Os01g0711000 | UP | OsBBD1 | Protein of unknown function DUF151 domain containing protein |
| Os01g0714600 | DOWN | - | Similar to Chaperone protein dnaJ 10 |
| Os01g0716500 | UP | NRT2.3 | Nitrate transporter, Nitrate transporter |
| Os01g0718300 | DOWN | - | Hypothetical conserved gene |
| Os01g0719800 | DOWN | - | Protein of unknown function DUF292, eukaryotic domain containing protein |
| Os01g0720200 | UP | - | Conserved hypothetical protein |
| Os01g0720400 | UP | LOGL1 | Similar to lysine decarboxylase-like protein |
| Os01g0725000 | DOWN | - | Similar to Vacuolar ATP synthase subunit B isoform 2 (EC 3.6.3.14) (V-ATPase B subunit 2) (Vacuolar proton pump B subunit 2) |
| Os01g0725800 | DOWN | - | Similar to cDNA clone:J023088C01, full insert sequence |
| Os01g0726400 | DOWN | - | Methyltransferase type 12 domain containing protein |
| Os01g0727800 | DOWN | D61 | Receptor serine/threonine kinase, Organ development through controlling cell division and elongatio |
| Os01g0727820 | DOWN | - | Hypothetical protein |
| Os01g0727840 | DOWN | - | Non-protein coding transcript |

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|---|---|---|---|
| Os01g0732801 | DOWN | OsACP1 | HAD-superfamily subfamily IB hydrolase, hypothetical 1 protein |
| Os01g0733001 | DOWN | - | Similar to H0402C08.3 protein |
| Os01g0733200 | DOWN | OsWD40-24 | WD40/YVTN repeat-like domain containing protein |
| Os01g0735900 | UP | MADS32 | MADS box transcription factor, Regulation of floral organ identit |
| Os01g0736100 | UP | OsSub3 | Peptidase S8, subtilisin-related domain containing protein |
| Os01g0738800 | UP | - | Hypothetical protein |
| Os01g0740600 | UP | OsSub3 | Similar to subtilase family protein |
| Os01g0740650 | UP | - | Conserved hypothetical protein |
| Os01g0740700 | UP | - | Similar to NRAMP3 (NRAMP metal ion transporter 3); manganese ion transmembrane transporter/ metal ion transmembrane transporter |
| Os01g0749200 | DOWN | OsHsfC1b | Similar to Heat shock transcription factor 29 (Fragment) |
| Os01g0752200 | UP | OsUGT706B1 | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os01g0764400 | UP | OsUGT706C1 | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os01g0767600 | UP | OsPFK02 | Conserved hypothetical protein |
| Os01g0768100 | DOWN | - | Transferrin receptor-like, dimerisation domain containing protein |
| Os01g0769700 | DOWN | - | Similar to glutamate carboxypeptidase 2 |
| Os01g0770000 | DOWN | - | Hypothetical protein |
| Os01g0770200 | DOWN | - | Hypothetical conserved gene |
| Os01g0777700 | DOWN | WLP1 | Chloroplast ribosome L13 protein, Chloroplast development under low temperature condition |
| Os01g0781200 | DOWN | OsCesA4 | Similar to Cellulose synthase (Fragment) |
| Os01g0782200 | DOWN | NOG1 | Enoyl-CoA hydratase/isomerase, Regulation of grain number and the yiel |
| Os01g0787600 | UP | - | Similar to Dynein light chain |
| Os01g0788400 | UP | CM | Similar to Chorismate mutase, chloroplast precursor (EC 5.4.99.5) (CM-1) |
| Os01g0788451 | UP | - | Conserved hypothetical protein |
| Os01g0793800 | UP | - | Conserved hypothetical protein |
| Os01g0795600 | DOWN | DRUS2 | Receptor-like kinase, Control of reproductive growth and development, Repression of cell deat |
| Os01g0798500 | DOWN | - | Uncharacterised protein family UPF0089 domain containing protein |
| Os01g0808100 | DOWN | TYDC | Aromatic L-amino acid decarboxylase (AADC), Conversion of tyrosine into tyramin |
| Os01g0812900 | UP | OsCKX5 | Similar to Cytokinin dehydrogenase 5 precursor (EC 1.5.99.12) (Cytokinin oxidase 5) (CKO5) (AtCKX5) (AtCKX6) |
| Os01g0813000 | DOWN | - | Similar to acid phosphatase/ oxidoreductase/ transition metal ion binding |
| Os01g0813800 | DOWN | Pi64 | Similar to Rust resistance protein |
| Os01g0814800 | DOWN | - | Diacylglycerol kinase, catalytic region domain containing protein |
| Os01g0814900 | UP | OsPOP4 | Similar to Salicylic acid-binding protein 2 |
| Os01g0821600 | DOWN | OsPME6 | Similar to Pectinesterase (EC 3.1.1.11) (Fragment) |

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|---|---|---|---|
| Os01g0824700 | DOWN | - | Hypothetical protein |
| Os01g0825800 | UP | - | Di-copper centre-containing domain containing protein |
| Os01g0826400 | DOWN | - | Conserved hypothetical protein |
| Os01g0829000 | DOWN | Hwi2 | Similar to Subtilase |
| Os01g0829100 | DOWN | - | Conserved hypothetical protein |
| Os01g0832600 | UP | - | Similar to predicted protein |
| Os01g0833150 | DOWN | OsbZIP08 | Similar to BZIP transcription factor |
| Os01g0833600 | DOWN | - | Similar to alphavirus core protein family |
| Os01g0834100 | UP | - | Similar to 14 kDa zinc-binding protein |
| Os01g0837000 | DOWN | Os1bglu3 | Similar to Beta-glucosidase 3 |
| Os01g0838350 | UP | - | Similar to Cysteine synthase, chloroplast precursor (EC 2.5.1.47 |
| Os01g0838600 | UP | NFR | Similar to Cytochrome b5 reductase |
| Os01g0839300 | UP | OsWRKY21 | WRKY transcription factor 48-like protein (WRKY transcription factor 21) |
| Os01g0841600 | UP | OsFbox048 | Cyclin-like F-box domain containing protein |
| Os01g0841700 | DOWN | OsATL7 | Amino acid transporter, transmembrane domain containing protein |
| Os01g0841800 | DOWN | OsWRKY24 | WRKY transcription factor 24 (WRKY24) |
| Os01g0842200 | DOWN | - | Thioredoxin-like fold domain containing protein |
| Os01g0845000 | DOWN | - | Ankyrin domain containing protein |
| Os01g0846000 | DOWN | - | Similar to Leucoanthocyanidin dioxygenase-like protein |
| Os01g0847700 | UP | - | Similar to predicted protein |
| Os01g0847800 | UP | - | Conserved hypothetical protein |
| Os01g0848900 | UP | SIP1 | Aldehyde dehydrogenase, conserved site domain containing protein |
| Os01g0855200 | UP | OsNPR4 | Ankyrin repeat containing protein |
| Os01g0857500 | DOWN | OsIPS2 | Conserved hypothetical protein |
| Os01g0864500 | DOWN | - | Zinc finger, C2H2-like domain containing protein |
| Os01g0866400 | DOWN | - | Similar to 50S ribosomal protein L17 |
| Os01g0871300 | UP | OscTPI | Triose phosphate isomerase (EC 5.3.1.1), Abiotic stress response, Response to methylglyoxal (cytotoxin |
| Os01g0871800 | DOWN | Rpp17 | Similar to Isoform ERG1b of Elicitor-responsive protein 1 |
| Os01g0871900 | DOWN | - | Ribonuclease II and R domain containing protein |
| Os01g0873200 | DOWN | - | Similar to Scarecrow-like 9 (Fragment) |
| Os01g0874800 | DOWN | - | Hypothetical conserved gene |
| Os01g0881300 | DOWN | - | Nucleic acid-binding, OB-fold domain containing protein |
| Os01g0881800 | DOWN | AKR2 | Aldo-keto reductase, Detoxification of reactive aldehydes, Abiotic stress toler-anc |
| Os01g0882200 | DOWN | AKR3 | Similar to Aldose reductase (EC 1.1.1.21) (AR) (Aldehyde reductase) (20-al-pha- hydroxysteroid dehydrogenase) (EC 1.1.1.149) (20-alpha-HSD) |
| Os01g0883100 | DOWN | - | Conserved hypothetical protein |

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|---|---|---|---|
| Os01g0885500 | DOWN | - | Tetratricopeptide-like helical domain containing protein |
| Os01g0890600 | DOWN | - | Xanthine/uracil/vitamin C permease family protein |
| Os01g0891400 | DOWN | ENAC1 | NAC (NAM ATAF1/2 CUC2) transcription factor, Early and transient regulator of abiotic stress response |
| Os01g0891601 | DOWN | OsSDS1 | Harpin-induced 1 domain containing protein |
| Os01g0891700 | UP | FR | Similar to Fructose-1,6-bisphosphatase (EC 3.1.3.11) (Fragment) |
| Os01g0893700 | UP | - | Pyridoxal phosphate-dependent transferase, major region domain containing protein |
| Os01g0901900 | DOWN | - | TGF-beta receptor, type I/II extracellular region family protein |
| Os01g0902100 | DOWN | - | Similar to POT family protein |
| Os01g0905200 | DOWN | - | Similar to Amidophosphoribosyltransferase, chloroplast precursor (EC 2.4.2.14) (Glutamine phosphoribosylpyrophosphate amidotransferase) (ATASE) (GPAT) (Fragment) |
| Os01g0905300 | DOWN | - | Similar to DNA polymerase I |
| Os01g0905700 | UP | - | Conserved hypothetical protein |
| Os01g0908700 | DOWN | OsSWEET 1a | Non-protein coding transcript |
| Os01g0909400 | DOWN | - | Conserved hypothetical protein |
| Os01g0912850 | DOWN | - | Similar to octopine synthase binding factor3 |
| Os01g0915900 | DOWN | OsMADS2 | Similar to PISTILLATA-like MADS box protein |
| Os01g0916100 | DOWN | - | Hypothetical conserved gene |
| Os01g0919400 | DOWN | - | Protein kinase, catalytic domain domain containing protein |
| Os01g0920300 | DOWN | - | S1, RNA binding domain containing protein |
| Os01g0922700 | UP | - | Leucine-rich repeat, N-terminal domain containing protein |
| Os01g0924200 | UP | - | Leucine-rich repeat, N-terminal domain containing protein |
| Os01g0926300 | UP | - | DOMON domain domain containing protein |
| Os01g0930000 | DOWN | - | S1, RNA binding domain containing protein |
| Os01g0930400 | UP | OsABCC2 | Similar to MRP-like ABC transporter |
| Os01g0931100 | DOWN | OsEXO70 FX15 | Exo70 exocyst complex subunit family protein |
| Os01g0937100 | UP | OsEXO70 FX14 | Similar to Leucine zipper protein-like |
| Os01g0940000 | UP | - | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os01g0940800 | UP | OsRFP | Similar to Hnrpa2b1-prov protein |
| Os01g0945300 | DOWN | - | Protein of unknown function DUF868, plant family protein |
| Os01g0948500 | DOWN | - | Conserved hypothetical protein |
| Os01g0948600 | UP | - | Conserved hypothetical protein |
| Os01g0949300 | DOWN | - | Similar to loricrin |
| Os01g0949700 | UP | SPS1 | Sucrose phosphate synthase, Sucrose synthesis in pollen germinatio |
| Os01g0952500 | UP | - | Methyltransferase small domain containing protein |
| Os01g0952900 | DOWN | - | Conserved hypothetical protein |

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|---|---|---|---|
| Os01g0959750 | DOWN | - | Conserved hypothetical protein |
| Os01g0960800 | UP | - | Similar to Transaldolase (EC 2.2.1.2) |
| Os01g0962600 | UP | - | Similar to CM0545.330.nc protein |
| Os01g0971600 | DOWN | HAK5 | Potassium transporter, High-affinity K acquisition, Root-to-shoot K transport, K-regulated salt toleranc |
| Os01g0975000 | DOWN | - | Conserved hypothetical protein |
| Os01g0975900 | UP | - | Similar to Xylanase inhibitor precursor (Xylanase inhibitor TAXI-I) |
| Os01g0977250 | UP | CKX4 | Cytokinin oxidase/dehydrogenase, Crown root formatio |
| Os01g0978500 | DOWN | Gns6 | Similar to Beta-1,3-glucanase precursor |
| Os02g0101000 | UP | OsBAT4 | Amino acid/polyamine transporter I family protein |
| Os02g0101750 | DOWN | - | Conserved hypothetical protein |
| Os02g0107900 | DOWN | - | Armadillo-like helical domain containing protein |
| Os02g0109200 | DOWN | - | Conserved hypothetical protein |
| Os02g0109900 | DOWN | - | EF-Hand type domain containing protein |
| Os02g0114033 | DOWN | OsGSTU7 | Glutathione S-transferase, C-terminal domain containing protein |
| Os02g0114200 | UP | RR4 | A-type response regulator, Cytokinin signalin |
| Os02g0115900 | UP | - | Conserved hypothetical protein |
| Os02g0120000 | DOWN | - | Conserved hypothetical protein |
| Os02g0122600 | DOWN | - | Protein Transporter, Pam16 family protein |
| Os02g0122900 | DOWN | RPS10 | Similar to 40S ribosomal protein S10-1 |
| Os02g0134200 | DOWN | OsSTA45 | Similar to Sn-glycerol-3-phosphate dehydrogenase (Fragment) |
| Os02g0137450 | DOWN | OsDSR3 | Protein of unknown function DUF966 family protein |
| Os02g0138100 | DOWN | OsMYB48 | MYB-related transcription factor, Drought and salinity toleranc |
| Os02g0139400 | DOWN | OsTIP1 | Similar to Tonoplast membrane integral protein ZmTIP1-2 |
| Os02g0141100 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os02g0145200 | UP | - | Hypothetical gene |
| Os02g0150600 | DOWN | - | Conserved hypothetical protein |
| Os02g0152900 | DOWN | OsATL11 | Amino acid transporter, transmembrane domain containing protein |
| Os02g0153200 | UP | - | Hypothetical gene |
| Os02g0154000 | DOWN | - | Similar to ABC transporter family, cholesterol/phospholipid flippase |
| Os02g0154200 | DOWN | - | Protein of unknown function DUF793 family protein |
| Os02g0161100 | DOWN | - | Hypothetical conserved gene |
| Os02g0161200 | DOWN | - | Glutamine-Leucine-Glutamine, QLQ domain containing protein |
| Os02g0161300 | DOWN | CBP3 | Serine carboxypeptidase III precursor (EC 3.4.16.5) |
| Os02g0162600 | DOWN | OsBiP1 | Endosperm lumenal binding protein |
| Os02g0164800 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os02g0165100 | DOWN | - | EF-Hand type domain containing protein |
| Os02g0165200 | DOWN | - | Similar to Dimethyladenosine transferase |
| Os02g0168200 | UP | CDPK4 | Calcium-dependent protein kinase, Positive regulator of the salt and drought stress response |
| Os02g0173100 | DOWN | OsSGL | DUF1645 family protein, Regulation of stress-tolerance and grain lengt |

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|---|---|---|---|
| Os02g0174300 | DOWN | OsHAC703 | Conserved hypothetical protein |
| Os02g0181300 | DOWN | - | Conserved hypothetical protein |
| Os02g0184300 | DOWN | OsSPL3 | Similar to Squamosa promoter-binding-like protein 3 |
| Os02g0184900 | UP | OsARF5 | Similar to Auxin response factor 5 |
| Os02g0190300 | UP | - | Conserved hypothetical protein |
| Os02g0193732 | UP | - | Similar to Pyridine nucleotide-disulphide oxidoreductase (Fragment) |
| Os02g0198500 | UP | YL1 | Nucleus-encoded chloroplast protein, Chloroplast development, Biogenesis of chloroplast ATP synthas |
| Os02g0198700 | DOWN | LRK7 | Leucine-rich repeat receptor-like kinas |
| Os02g0199200 | DOWN | LRK2 | Leucine-rich repeat receptor-like kinase, Positive regulation of the drought stress response and tiller developmen |
| Os02g0199300 | DOWN | LRK1 | Leucine-rich repeat receptor kinase, Regulation of grain yiel |
| Os02g0203300 | UP | OsFH10 | Actin-binding FH2 domain containing protein |
| Os02g0205100 | UP | OsC3H13 | Zinc finger, CCCH-type domain containing protein |
| Os02g0206700 | UP | - | Similar to Mot1 (Fragment) |
| Os02g0209300 | DOWN | - | Conserved hypothetical protein |
| Os02g0209900 | UP | - | Zinc finger, C2H2-type domain containing protein |
| Os02g0211000 | DOWN | OsRLCK63 | Protein kinase, core domain containing protein |
| Os02g0211350 | UP | - | Hypothetical protein |
| Os02g0211500 | DOWN | - | Similar to Transfactor-like protein |
| Os02g0212400 | UP | CYP97B4 | Similar to cytochrome P450 |
| Os02g0212900 | DOWN | - | Hypothetical conserved gene |
| Os02g0215200 | UP | 4CL3 | 4-coumarate:coenzyme A ligase, Lignin biosynthesis, Defense against woundin |
| Os02g0215700 | DOWN | WRKY71 | WRKY transcription factor, Defense respons |
| Os02g0216400 | DOWN | - | Hypothetical protein |
| Os02g0221900 | UP | - | Cytochrome P450 family protein |
| Os02g0224800 | UP | GH2 | Cinnamyl-alcohol dehydrogenase, Lignin biosynthesis, Monolignol biosynthesi |
| Os02g0227200 | UP | OsABCB9 | P-glycoprotein homologue |
| Os02g0227900 | UP | - | Hypothetical conserved gene |
| Os02g0234500 | DOWN | - | Conserved hypothetical protein |
| Os02g0240100 | UP | OsSub12 | Similar to Subtilisin-like protease |
| Os02g0241200 | DOWN | - | Disease resistance protein domain containing protein |
| Os02g0241300 | UP | OsFKBP16-1 | Peptidyl-prolyl cis-trans isomerase, FKBP-type domain containing protein |
| Os02g0244700 | UP | - | Similar to UDP-glycosyltransferase UGT75E3 |
| Os02g0247800 | DOWN | - | Conserved hypothetical protein |
| Os02g0251800 | DOWN | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |

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|---|---|---|---|
| Os02g0251900 | DOWN | - | Hypothetical conserved gene |
| Os02g0255700 | DOWN | - | Syntaxin, N-terminal domain containing protein |
| Os02g0255801 | DOWN | OsABCA1 | Conserved hypothetical protein |
| Os02g0259600 | DOWN | - | Hypothetical gene |
| Os02g0260500 | DOWN | - | Non-protein coding transcript |
| Os02g0261100 | UP | - | Conserved hypothetical protein |
| Os02g0269200 | DOWN | OsRLCK66 | Similar to Protein kinase domain containing protein, expressed |
| Os02g0271000 | DOWN | HDAC2 | Class-I type histone deacetylase, Vegetative growt |
| Os02g0273000 | UP | - | Protein kinase, catalytic domain domain containing protein |
| Os02g0273800 | DOWN | - | Conserved hypothetical protein |
| Os02g0273900 | DOWN | Os1900 | Cytochrome P450 family member, Homolog of Arabidopsis MORE AXILLARY GROWTH 1 (MAX1 |
| Os02g0277700 | DOWN | - | Ndr family protein |
| Os02g0281000 | DOWN | OSENOD93B | Early nodulin |
| Os02g0282500 | DOWN | OsRLCK70 | Leucine-rich repeat domain containing protein |
| Os02g0286933 | DOWN | - | NAD(P)-binding domain containing protein |
| Os02g0287900 | UP | prx30 | Similar to Peroxidase 2 (Fragment) |
| Os02g0288400 | UP | - | Myb-like DNA-binding domain, SHAQKYF class domain containing protein |
| Os02g0289700 | UP | - | Conserved hypothetical protein |
| Os02g0306401 | DOWN | PEPC-1 | Similar to Phosphoenolpyruvate carboxylase 1 (EC 4.1.1.31) (PEPCase 1) (CP21) |
| Os02g0318100 | UP | OsEFCAX2 | Similar to calcium ion binding protein |
| Os02g0320300 | DOWN | OsVQ6 | VQ domain containing protein |
| Os02g0323600 | UP | OsVQ7 | Similar to Tobacco rattle virus-induced protein variant 2 |
| Os02g0326700 | DOWN | FLL1 | Conserved hypothetical protein |
| Os02g0332450 | UP | - | Non-protein coding transcript |
| Os02g0332700 | DOWN | OsRPL21 | Similar to 50S ribosomal protein L21, chloroplast precursor (CL21) (CS-L7) |
| Os02g0433900 | UP | SIP7 | Hypothetical conserved gene |
| Os02g0453500 | DOWN | UBC5B | Ubiquitin-conjugating enzyme E2, Elicitor-induced defense respons |
| Os02g0460200 | DOWN | - | Dynein light chain, type 1 family protein |
| Os02g0462401 | DOWN | OsSub17 | Similar to Subtilase |
| Os02g0467200 | UP | - | Similar to Uridine kinase-like protein |
| Os02g0467300 | UP | - | Multi antimicrobial extrusion protein MatE domain containing protein |
| Os02g0467400 | UP | - | Conserved hypothetical protein |
| Os02g0470000 | DOWN | - | Leucine-rich repeat domain containing protein |
| Os02g0471100 | UP | OsPP23 | RmlC-like jelly roll fold domain containing protein |
| Os02g0474000 | DOWN | - | Disease resistance protein domain containing protein |

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| Os02g0486500 | DOWN | - | Conserved hypothetical protein |
| Os02g0493300 | DOWN | OsFbox080 | Cyclin-like F-box domain containing protein |
| Os02g0494400 | DOWN | OsABCC5 | Similar to MRP-like ABC transporter |
| Os02g0496900 | UP | - | Hypothetical protein |
| Os02g0498666 | DOWN | OsNAAT1 | Similar to Nicotianamine aminotransferase A |
| Os02g0503800 | UP | - | Similar to Alternative oxidase |
| Os02g0503850 | UP | - | Similar to Chalcone isomerase 3 |
| Os02g0505700 | DOWN | Os-CYP51H4 | Similar to Cytochrome P450-like protein |
| Os02g0508000 | UP | OsRhmbd6 | Peptidase S54, rhomboid domain containing protein |
| Os02g0508650 | UP | - | Hypothetical conserved gene |
| Os02g0510600 | DOWN | - | Conserved hypothetical protein |
| Os02g0513800 | DOWN | - | Conserved hypothetical protein |
| Os02g0527900 | UP | - | Similar to mitochondrial glycoprotein |
| Os02g0528900 | UP | - | Similar to OSIGBa0131F24.5 protein |
| Os02g0530300 | UP | - | Conserved hypothetical protein |
| Os02g0532300 | UP | - | Hypothetical protein |
| Os02g0534400 | UP | - | Conserved hypothetical protein |
| Os02g0536300 | DOWN | - | Hypothetical protein |
| Os02g0536500 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os02g0539200 | DOWN | - | Conserved hypothetical protein |
| Os02g0540700 | DOWN | OsFbox088 | F-box associated interaction domain domain containing protein |
| Os02g0557800 | UP | - | Hypothetical conserved gene |
| Os02g0566300 | DOWN | - | Tetratricopeptide-like helical domain containing protein |
| Os02g0567800 | UP | - | Similar to TPR Domain containing protein, expressed |
| Os02g0568700 | UP | - | Mitochondrial import receptor, TOM9-2 subunit, plant domain containing protein |
| Os02g0570400 | DOWN | - | Non-protein coding transcript |
| Os02g0571800 | UP | - | Cytochrome P450 domain containing protein |
| Os02g0571900 | UP | - | Similar to Cytochrome P450 CYP81L6 |
| Os02g0572050 | UP | - | Hypothetical protein |
| Os02g0573500 | DOWN | - | Trimeric LpxA-like domain containing protein |
| Os02g0579600 | UP | - | Non-protein coding transcript |
| Os02g0579800 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os02g0581400 | DOWN | - | Ovarian tumour, otubain domain containing protein |
| Os02g0581500 | DOWN | - | Hypothetical conserved gene |
| Os02g0584700 | DOWN | ABCG41 | Similar to PDR-like ABC transporter |
| Os02g0584800 | DOWN | OsSAP5 | Zinc finger, AN1-type domain containing protein |

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|---|---|---|---|
| Os02g0585200 | DOWN | - | Hypothetical conserved gene |
| Os02g0588500 | DOWN | OSCIN1 | Cell wall invertase (EC 3.2.1.26) |
| Os02g0594900 | DOWN | OsFbox093 | Leucine-rich repeat 2 domain containing protein |
| Os02g0596700 | UP | - | Similar to H0622F05.5 protein |
| Os02g0597200 | DOWN | OsPUB33 | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os02g0601300 | UP | OsPUB45 | Similar to Arm repeat-containing protein |
| Os02g0602400 | DOWN | OsZFP6 | Conserved hypothetical protein |
| Os02g0606600 | UP | - | Protein kinase, catalytic domain domain containing protein |
| Os02g0608700 | UP | OSRR2 | A-type response regulator, Cytokinin signalin |
| Os02g0609900 | DOWN | - | Conserved hypothetical protein |
| Os02g0611800 | UP | - | Alpha/beta hydrolase fold-3 domain containing protein |
| Os02g0613900 | UP | OsTPS5 | Terpene synthase-like domain containing protein |
| Os02g0614200 | UP | OsKS7 | Similar to Ent-kaurene synthase 1A |
| Os02g0615400 | UP | OsKS6 | Terpene synthase-like domain containing protein |
| Os02g0616600 | UP | CYP76M6 | Cytochrome P450 family protein |
| Os02g0617600 | DOWN | - | Similar to Ent-cassa-12,15-diene synthase |
| Os02g0618000 | UP | - | Similar to Monosaccharide transporter 1 |
| Os02g0620200 | UP | Os-MADS27 | Transcription factor MADS27 |
| Os02g0621300 | UP | OsFWL2 | Similar to Fw2.2 |
| Os02g0621800 | UP | - | Conserved hypothetical protein |
| Os02g0624300 | DOWN | - | Alpha/beta hydrolase fold-1 domain containing protein |
| Os02g0631601 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os02g0632900 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os02g0633066 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os02g0635200 | UP | - | Hypothetical conserved gene |
| Os02g0642200 | UP | - | Glycosyl transferase, family 17 protein |
| Os02g0649800 | UP | - | Similar to protein binding protein |
| Os02g0650900 | UP | - | Conserved hypothetical protein |
| Os02g0654700 | DOWN | OsGapC1 | Similar to Glyceraldehyde-3-phosphate dehydrogenase, cytosolic 3 (EC 1.2.1.12) |
| Os02g0661100 | DOWN | - | Mitochodrial transcription termination factor-related family protein |
| Os02g0664100 | DOWN | OsCML17 | Hypothetical conserved gene |
| Os02g0666250 | UP | - | Similar to predicted protein |
| Os02g0669700 | UP | - | Leucine-rich repeat, N-terminal domain containing protein |
| Os02g0678200 | DOWN | OsHCT2 | Similar to Hydroxyanthranilate hydroxycinnamoyltransferase 3 |
| Os02g0681632 | DOWN | - | Similar to Adenine phosphoribosyltransferase 2 (EC 2.4.2.7) (APRT) |
| Os02g0682600 | UP | - | Conserved hypothetical protein |
| Os02g0684000 | UP | - | Leucine-rich repeat domain containing protein |
| Os02g0687200 | DOWN | - | Hypothetical protein |

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|---|---|---|---|
| Os02g0691500 | UP | - | Protein phosphatase 2A, regulatory subunit PR55 domain containing protein |
| Os02g0694800 | DOWN | - | Non-protein coding transcript |
| Os02g0696700 | UP | - | Conserved hypothetical protein |
| Os02g0698000 | DOWN | OsCER1 | Homologous protein of CER1, Very-long-chain (VLC) alkane biosynthesis, Regulation of anther development and plastids differentiatio |
| Os02g0703600 | DOWN | HWH1 | Glucose-methanol-choline (GMC) oxidoreductase family protein, Hybrid breakdown (HB |
| Os02g0710102 | DOWN | OsMYB30 | R2R3-type MYB transcription factor, Negative regulation of cold tolerance, Maintenance of Pi homeostasi |
| Os02g0710900 | UP | - | Similar to predicted protein |
| Os02g0724500 | DOWN | OsWAK15 | Conserved hypothetical protein |
| Os02g0725200 | DOWN | OsWAK16 | Protein kinase, catalytic domain domain containing protein |
| Os02g0727100 | DOWN | NIT1 | Similar to Nitrilase 2 (EC 3.5.5.1) |
| Os02g0727300 | DOWN | OsREM1.4 | Similar to Remorin |
| Os02g0728500 | DOWN | OsALDH3E2 | Similar to Fatty aldehyde dehydrogenase 1 |
| Os02g0730000 | UP | - | Similar to Cytochrome B5 homolog (Fragment) |
| Os02g0731400 | DOWN | OsGDH3 | Similar to Glutamate dehydrogenase 2 (EC 1.4.1.3) (GDH 2) |
| Os02g0731500 | DOWN | ERF91 | AP2/ERF family protein, Abiotic stress respons |
| Os02g0734300 | DOWN | OsTPP1 | Similar to Trehalose-6-phosphate phosphatase |
| Os02g0735800 | DOWN | - | Hypothetical conserved gene |
| Os02g0736400 | UP | - | Hypothetical gene |
| Os02g0736900 | DOWN | - | Nucleotide-binding, alpha-beta plait domain containing protein |
| Os02g0737200 | DOWN | OsSPX-MFS2 | SPX-MFS protein, Pi homeostasi |
| Os02g0738100 | DOWN | OsRLCK83 | Peptidoglycan-binding Lysin subgroup domain containing protein |
| Os02g0739000 | DOWN | - | Zinc finger, Tim10/DDP-type family protein |
| Os02g0739100 | DOWN | - | Tetratricopeptide-like helical domain containing protein |
| Os02g0740500 | UP | - | Protein of unknown function DUF581 family protein |
| Os02g0741500 | DOWN | OsbHLH049 | Similar to OSIGBa0142I02-OSIGBa0101B20.1 protein |
| Os02g0741700 | UP | - | Similar to ATP binding / protein kinase |
| Os02g0744000 | DOWN | JMJ707 | Transcription factor jumonji/aspartyl beta-hydroxylase domain containing protein |
| Os02g0748800 | DOWN | OsPrk | Similar to Phosphoribulokinase, chloroplast precursor (EC 2.7.1.19) (Phospho-pentokinase) (PRKase) (PRK) |
| Os02g0753300 | UP | OsABA8OX1 | Similar to Abscisic acid 8'-hydroxylase 1 |
| Os02g0754300 | DOWN | - | Hypothetical conserved gene |
| Os02g0755900 | UP | - | Heat shock protein Hsp70 family protein |

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|---|---|---|---|
| Os02g0757100 | DOWN | - | Concanavalin A-like lectin/glucanase domain containing protein |
| Os02g0759400 | DOWN | OsSTA72 | Similar to transporter-related |
| Os02g0759900 | DOWN | OsSET12 | SET domain containing protein |
| Os02g0761200 | UP | OsATL3 | Amino acid transporter, transmembrane domain containing protein |
| Os02g0769800 | DOWN | OsPUB21 | Similar to Beta-catenin repeat family protein |
| Os02g0773800 | UP | OsSERL3 | Similar to BRASSINOSTEROID INSENSITIVE 1-associated receptor kinase 1 |
| Os02g0774300 | UP | OsALDH2a | Similar to Mitochondrial aldehyde dehydrogenase |
| Os02g0777400 | DOWN | OsUCL5 | Similar to Chemocyanin precursor (Basic blue protein) (Plantacyanin) |
| Os02g0781900 | UP | - | Similar to cDNA, clone: J065098J18, full insert sequence |
| Os02g0783625 | UP | - | Similar to Nudix hydrolase 18, mitochondrial precursor (EC 3.6.1.-) (AtNUDT18) |
| Os02g0790500 | DOWN | - | Pentatricopeptide repeat domain containing protein |
| Os02g0791500 | DOWN | OsDHODH1 | Aldolase-type TIM barrel domain containing protein |
| Os02g0794400 | DOWN | - | Conserved hypothetical protein |
| Os02g0794600 | UP | - | Conserved hypothetical protein |
| Os02g0798200 | UP | - | Conserved hypothetical protein |
| Os02g0802500 | UP | - | DEAD-like helicase, N-terminal domain containing protein |
| Os02g0805800 | DOWN | OsFH16 | Similar to Formin-like protein 16 |
| Os02g0806350 | DOWN | - | Conserved hypothetical protein |
| Os02g0807000 | DOWN | - | Ribbon-helix-helix domain containing protein |
| Os02g0807100 | DOWN | - | Conserved hypothetical protein |
| Os02g0807900 | DOWN | - | Similar to NDF6 (NDH DEPENDENT FLOW 6) |
| Os02g0811800 | UP | OsFbox109 | Similar to VMP3 protein |
| Os02g0813083 | UP | OsGRL4 | Thioredoxin fold domain containing protein |
| Os02g0813166 | UP | - | Lipoxygenase, LH2 domain containing protein |
| Os02g0817900 | DOWN | - | Ribosomal protein L29 family protein |
| Os02g0821400 | DOWN | - | UDP-glucuronosyl/UDP-glucosyltransferase domain containing protein |
| Os02g0824000 | DOWN | OsPHI-1 | Similar to Phi-1 protein |
| Os02g0824700 | UP | OsRING-1 | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os02g0827600 | DOWN | - | Similar to threonine endopeptidase |
| Os02g0828500 | UP | - | Armadillo-like helical domain containing protein |
| Os02g0828900 | DOWN | - | Similar to Mitogen-activated protein kinase kinase kinase 1 (EC 2.7.1.-) (Arabidospsis NPK1-related protein kinase 1). Splice isoform 1S |
| Os02g0830801 | DOWN | - | Conserved hypothetical protein |
| Os02g0832400 | DOWN | OsISC23 | Similar to Heat shock 70 kDa protein, mitochondrial precursor |
| Os02g0833100 | DOWN | OsRLCK85 | Similar to ER (ERECTA); transmembrane receptor protein kinase |
| Os03g0102000 | UP | OsSTA81 | Conserved hypothetical protein |

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|---|---|---|---|
| Os03g0105600 | UP | - | Similar to Lysine ketoglutarate reductase/saccharopine dehydrogenase |
| Os03g0106000 | DOWN | OsTPS5 | Hypothetical protein |
| Os03g0108600 | DOWN | OsUGlcAE3 | Similar to Nucleotide sugar epimerase-like protein (UDP-D-glucuronate 4-epimerase) (EC 5.1.3.6) |
| Os03g0109300 | UP | - | Similar to Translation initiation factor IF-3 (Fragment) |
| Os03g0111200 | DOWN | - | Similar to Copper chaperone COX17-1 |
| Os03g0111400 | UP | - | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os03g0112600 | DOWN | - | Similar to H(+)-translocating (Pyrophosphate-ENERGIZED) inorganic pyrophosphatase beta-1 polypeptide (EC 3.6.1.1) (Fragment) |
| Os03g0113500 | DOWN | - | Aminoglycoside phosphotransferase domain containing protein |
| Os03g0115300 | DOWN | - | Hypothetical protein |
| Os03g0115800 | DOWN | OsPPCK1 | Similar to Phosphoenolpyruvate carboxylase kinase 1 |
| Os03g0118450 | UP | - | Similar to Starch synthase V |
| Os03g0118600 | DOWN | OsWAK21 | Conserved hypothetical protein |
| Os03g0121700 | DOWN | OsCCR10 | Similar to Cinnamoyl-CoA reductase (EC 1.2.1.44) |
| Os03g0122200 | DOWN | OsFbox118 | Conserved hypothetical protein |
| Os03g0123500 | UP | OsFbox119 | Cyclin-like F-box domain containing protein |
| Os03g0126000 | UP | - | Armadillo-type fold domain containing protein |
| Os03g0126700 | UP | CYP97A4 | Cytochrome P450 family protein |
| Os03g0128200 | DOWN | OsRLCK90 | Protein kinase, core domain containing protein |
| Os03g0130300 | UP | - | Hypothetical conserved gene |
| Os03g0130900 | DOWN | - | Similar to Vacuolar ATP synthase subunit F (EC 3.6.3.14) (V-ATPase F subunit) (Vacuolar proton pump F subunit) (V-ATPase 14 kDa subunit) |
| Os03g0132900 | DOWN | - | Protein of unknown function DUF3531 domain containing protein |
| Os03g0133000 | DOWN | - | Tetratricopeptide-like helical domain containing protein |
| Os03g0133300 | DOWN | JMJ720 | Transcription factor jumonji domain containing protein |
| Os03g0135300 | DOWN | - | Similar to binding |
| Os03g0136900 | UP | OsGSL7 | Similar to Callose synthase 1 catalytic subunit |
| Os03g0138900 | DOWN | OsFRDL3 | Similar to antiporter/ drug transporter |
| Os03g0140700 | DOWN | - | Conserved hypothetical protein |
| Os03g0141200 | DOWN | OsTUB2 | Tubulin beta-1 chain (Beta-1 tubulin) |
| Os03g0146200 | UP | - | Uncharacterised protein family UPF0187 domain containing protein |
| Os03g0148400 | DOWN | OsRH50 | Similar to DEAD-box ATP-dependent RNA helicase 50 |
| Os03g0150600 | DOWN | LOGL3 | Similar to Lysine decarboxylase-like protein |
| Os03g0152700 | DOWN | OsREM1.3 | Similar to Remorin |
| Os03g0153100 | UP | - | Heavy metal transport/detoxification protein domain containing protein |
| Os03g0159100 | UP | - | Similar to Plus-3 domain containing protein, expressed |
| Os03g0169600 | UP | - | Conserved hypothetical protein |

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|---|---|---|---|
| Os03g0170100 | DOWN | - | Pentatricopeptide repeat domain containing protein |
| Os03g0178200 | DOWN | - | Conserved hypothetical protein |
| Os03g0179950 | UP | - | Non-protein coding transcript |
| Os03g0181800 | DOWN | - | Similar to Dihydrodipicolinate reductase-like protein |
| Os03g0184300 | UP | - | Similar to Nascent polypeptide-associated complex alpha subunit-like protein 3 (NAC-alpha-like protein 3) (Alpha-NAC-like protein 3) |
| Os03g0187550 | DOWN | - | Similar to 50S ribosomal protein L11 |
| Os03g0188100 | UP | HB365 | Similar to HOS66 protein |
| Os03g0188500 | DOWN | - | Similar to Phosphorybosyl anthranilate transferase 1 |
| Os03g0189100 | DOWN | - | Similar to Barley stem rust resistance protein |
| Os03g0190400 | DOWN | OsGSL10 | Similar to predicted protein |
| Os03g0198300 | DOWN | DEFL8 | Similar to Cp-thionin |
| Os03g0207400 | DOWN | OsRLCK96 | Serine/threonine protein kinase domain containing protein |
| Os03g0213100 | UP | Cht11 | Similar to Chitinase 11 |
| Os03g0218300 | DOWN | NAC22 | NAC transcription factor, Drought and salt stress tolerance, Modulation of ABA-mediated pathwa |
| Os03g0221200 | UP | - | Similar to F7F22.5 |
| Os03g0221800 | DOWN | OsGSTF3 | Similar to Glutathione S-transferase GST 10 (EC 2.5.1.18) |
| Os03g0225900 | DOWN | - | Similar to Aconitate hydratase, cytoplasmic (EC 4.2.1.3) (Citrate hydro-lyase) (Aconitase) |
| Os03g0226200 | UP | - | Conserved hypothetical protein |
| Os03g0231800 | UP | - | Tetratricopeptide-like helical domain containing protein |
| Os03g0232400 | DOWN | OsBamy2 | Similar to Beta-amylase PCT-BMYI (EC 3.2.1.2) |
| Os03g0233900 | UP | - | Conserved hypothetical protein |
| Os03g0234500 | DOWN | - | Protein of unknown function DUF740 family protein |
| Os03g0235700 | UP | PT1 | Pi transporter, Pi homeostasi |
| Os03g0242300 | UP | - | Pseudouridine synthase domain containing protein |
| Os03g0243100 | UP | - | Similar to FAD binding domain containing protein, expressed |
| Os03g0249100 | DOWN | - | Phosphoserine aminotransferase, chloroplast precursor (EC 2.6.1.52) (PSAT) |
| Os03g0254000 | DOWN | OsRLCK101 | Similar to Protein kinase APK1B, chloroplast precursor (EC 2.7.1.-) |
| Os03g0254200 | DOWN | RDD4 | Dof (DNA binding with one finger) transcription factor, Regulation of Flowering time, Brassinosteroid (BR) signaling to modulate plant architectur |
| Os03g0254800 | UP | - | Conserved hypothetical protein |
| Os03g0255100 | UP | - | Protein of unknown function YGGT family protein |
| Os03g0257600 | UP | - | Non-protein coding transcript |
| Os03g0259600 | DOWN | - | Protein of unknown function DUF936, plant family protein |
| Os03g0261100 | UP | - | Conserved hypothetical protein |
| Os03g0265400 | DOWN | - | Hypothetical gene |
| Os03g0265800 | UP | OsMATE1 | Similar to transparent testa 12 protein |

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|---|---|---|---|
| Os03g0271100 | DOWN | OsAGP3 | Glutelin family protein |
| Os03g0271400 | DOWN | - | Uncharacterised protein family UPF0503 domain containing protein |
| Os03g0271500 | DOWN | - | Hypothetical gene |
| Os03g0272400 | DOWN | OsDjC25 | Heat shock protein DnaJ, N-terminal domain containing protein |
| Os03g0272900 | DOWN | OsPP2C29 | Similar to Protein phosphatase 2C-like |
| Os03g0275300 | DOWN | - | Similar to Sec61p |
| Os03g0275450 | DOWN | - | Conserved hypothetical protein |
| Os03g0277700 | UP | - | Similar to Homocysteine S-methyltransferase 1 (EC 2.1.1.10) (S- methylmethionine:homocysteine methyltransferase 1) (SMM:Hcy S- methyltransferase 1) (ZmHMT-1) |
| Os03g0279200 | DOWN | - | Similar to Leucine Rich Repeat family protein, expressed |
| Os03g0284500 | DOWN | - | Cytochrome P450 family protein |
| Os03g0285800 | DOWN | AOS2 | Allene oxide synthase (CYP74A2), Biosynthesis of jasmonic acid (JA |
| Os03g0289400 | UP | HB2 | Non-symbiotic hemoglobin 2 (rHb2 |
| Os03g0294100 | UP | - | Similar to Squalene monooxygenase 1 (EC 1.14.99.7) |
| Os03g0298300 | DOWN | - | Phytosulfokine family protein |
| Os03g0301200 | DOWN | HB1 | Non-symbiotic hemoglobin 1 (rHb1 |
| Os03g0302200 | DOWN | prx37 | Haem peroxidase, plant/fungal/bacterial family protein |
| Os03g0309800 | DOWN | poxN | Similar to Peroxidase |
| Os03g0310800 | DOWN | - | Similar to Peptide transporter 1 |
| Os03g0319400 | DOWN | - | Hypothetical protein |
| Os03g0321700 | UP | OsADF5 | Similar to Actin-depolymerizing factor 5 (ADF-5) (AtADF5) |
| Os03g0324600 | DOWN | - | Conserved hypothetical protein |
| Os03g0327800 | DOWN | - | NB-ARC domain containing protein |
| Os03g0341100 | UP | - | Similar to predicted protein |
| Os03g0341300 | UP | CS | Similar to Chorismate synthase 1, chloroplast precursor (EC 4.2.3.5) (5-enolpyruvylshikimate-3-phosphate phospholyase 1) |
| Os03g0348200 | UP | OsBgal8 | Similar to Relative to SR12 protein (Fragment) |
| Os03g0351300 | DOWN | - | Hypothetical conserved gene |
| Os03g0352450 | DOWN | - | Ubiquitin domain containing protein |
| Os03g0353400 | DOWN | PLA2-II | Phospholipase A2 family protein |
| Os03g0356300 | DOWN | - | Similar to 50S ribosomal protein L4, chloroplast precursor (R-protein L4) |
| Os03g0364400 | DOWN | - | Protein of unknown function DUF2253, membrane domain containing protein |
| Os03g0364700 | DOWN | OsSIG2B | Similar to Sigma factor SIG2B |
| Os03g0367101 | DOWN | - | Armadillo-like helical domain containing protein |
| Os03g0377700 | DOWN | - | Conserved hypothetical protein |
| Os03g0379500 | UP | - | Conserved hypothetical protein |
| Os03g0386000 | UP | - | DVL family protein |
| Os03g0387300 | UP | - | Hypothetical conserved gene |
| Os03g0390400 | UP | - | Hypothetical protein |
| Os03g0400700 | UP | - | Protein of unknown function DUF26 domain containing protein |

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|---|---|---|---|
| Os03g0406100 | UP | - | Similar to Histone H2A |
| Os03g0412800 | DOWN | - | HAD-superfamily subfamily IIA hydrolase, CECR5 protein |
| Os03g0418700 | DOWN | OsMSRMK2 | MAP Kinase |
| Os03g0422800 | DOWN | OsStr2 | Rhodanese-like domain containing protein |
| Os03g0431200 | UP | SIP32 | Similar to pherophorin like protein |
| Os03g0438400 | UP | - | Uncharacterised protein family UPF0497, trans-membrane plant domain containing protein |
| Os03g0448600 | UP | - | COBRA-like protein 7 precursor |
| Os03g0563300 | DOWN | OsRFP | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os03g0570100 | UP | - | Similar to PPR2 |
| Os03g0571700 | UP | - | Similar to Hypersensitive reaction associated Ca2+-binding protein |
| Os03g0571900 | UP | CK1 | Serine/threonine protein kinase, Cold stress tolerance, Abiotic stresse |
| Os03g0573001 | DOWN | OsWRKY55 | Similar to WRKY transcription factor 55 |
| Os03g0575200 | DOWN | - | NB-ARC domain containing protein |
| Os03g0593600 | UP | NAC58 | NAC Family transcriptional activator, Abiotic stress response, Positive regulator of leaf senescenc |
| Os03g0597200 | DOWN | - | Similar to 60S ribosomal protein L18 |
| Os03g0599000 | UP | OsSWEET16 | Similar to Cytochrome c oxidoreductase |
| Os03g0602600 | DOWN | OsTPS10 | Terpene synthase-like domain containing protein |
| Os03g0606100 | DOWN | - | Similar to beta-amylase |
| Os03g0606200 | UP | - | Conserved hypothetical protein |
| Os03g0607700 | UP | OsINO80 | Hypothetical conserved gene |
| Os03g0617500 | DOWN | - | Similar to Poly(A)-binding protein C-terminal interacting protein 6 |
| Os03g0622600 | UP | - | Ribosomal protein L6 family protein |
| Os03g0626500 | UP | OsBBS1 | Receptor-like cytoplasmic kinase, Leaf senescence, Salt stress respons |
| Os03g0634400 | UP | - | Transcription elongation factor, TFIIS/CRSP70, N-terminal domain containing protein |
| Os03g0637600 | UP | Os-CYP75A11 | Similar to cytochrome P450 flavonoid 3',5'-hydroxylase |
| Os03g0638400 | UP | OsCslA5 | Cellulose synthase-like A5 |
| Os03g0648600 | DOWN | - | Similar to 40S ribosomal protein S9 |
| Os03g0650200 | UP | SRWD5 | Similar to Salt-responsive WD40 protein 5 |
| Os03g0655100 | UP | OsVQ12 | Similar to VQ motif family protein, expressed |
| Os03g0656900 | DOWN | Os-COX6b1 | Similar to Cytochrome c oxidase subunit 6b |
| Os03g0660300 | DOWN | OsLEA11 | Similar to retrotransposon protein |
| Os03g0660400 | DOWN | - | Similar to Protein kinase domain containing protein, expressed |
| Os03g0660500 | DOWN | SUS1 | Sucrose synthase 2 (EC 2.4.1.13) (Sucrose-UDP glucosyltransferase 2) |

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|---|---|---|---|
| Os03g0661600 | UP | - | Hypothetical conserved gene |
| Os03g0663400 | UP | OsSPX5 | SPX domain-containing protein, Negative regulation of phosphate signaling, Pi homeostasi |
| Os03g0663500 | UP | OsG6PDH 4 | Similar to Glucose-6-phosphate dehydrogenase precursor |
| Os03g0667100 | DOWN | - | Conserved hypothetical protein |
| Os03g0679700 | DOWN | - | Similar to D-mannose binding lectin family protein, expressed |
| Os03g0682822 | UP | - | Similar to OSIGBa0135L04.1 protein |
| Os03g0684500 | DOWN | - | Similar to N-acetyl-glutamate synthase |
| Os03g0684800 | DOWN | - | Hypothetical protein |
| Os03g0685500 | UP | OsWD40-76 | WD40 repeat-like domain containing protein |
| Os03g0685700 | DOWN | ELL | Magnesium-chelatase subunit ChlI, Mg-chelatase I subunit, Chlorophyll bio-synthesis, Chloroplast developmen |
| Os03g0685900 | UP | - | Conserved hypothetical protein |
| Os03g0686300 | DOWN | - | Similar to Cytochrome P450 79A1 (EC 1.14.13.41) (Tyrosine N-monooxygen-ase) (Cytochrome P450Tyr) |
| Os03g0693900 | UP | - | Similar to TRANSPARENT TESTA 12 protein |
| Os03g0694000 | UP | PEZ1 | Similar to transparent testa 12 protein |
| Os03g0701300 | DOWN | - | Conserved hypothetical protein |
| Os03g0704000 | DOWN | OsHAK16 | Similar to Potassium transporter |
| Os03g0710000 | DOWN | CYP71W1 | Similar to Cytochrome P450 family protein, expressed |
| Os03g0710600 | DOWN | YSA | Pentatricopeptide repeat protein, Chloroplast developmen |
| Os03g0712800 | UP | - | Hypothetical conserved gene |
| Os03g0718000 | UP | - | NB-ARC domain containing protein |
| Os03g0718100 | UP | HSA1 | PfkB family fructokinase, WLP2 paralog, Chloroplast biogenesis and plant growth, Protection of chloroplasts under heat stres |
| Os03g0718800 | UP | - | Similar to predicted protein |
| Os03g0719400 | UP | RMtATP6 | Mitochondrial ATP synthase 6 KD subunit |
| Os03g0722400 | DOWN | - | Zinc finger, C2H2-like domain containing protein |
| Os03g0726200 | UP | CycD5 | Cyclin, C-terminal domain containing protein |
| Os03g0727600 | DOWN | - | Conserved hypothetical protein |
| Os03g0728900 | DOWN | - | Similar to predicted protein |
| Os03g0734200 | UP | OsCIPK07 | Serine/threonine protein kinase domain containing protein |
| Os03g0734300 | UP | - | Leucine-rich repeat, plant specific containing protein |
| Os03g0736300 | UP | - | Similar to OSIGBa0153E02-OSIGBa0093I20.19 protein |
| Os03g0736400 | DOWN | - | Similar to Zinc finger, C3HC4 type family protein, expressed |
| Os03g0739700 | DOWN | - | Similar to Cytochrome P450 CYP92C5 |
| Os03g0744600 | UP | - | Similar to Cupin, RmlC-type |
| Os03g0744700 | DOWN | NUS1 | Plastid RNA-binding protein, Regulation of chloroplast RNA metabolism, Early chloroplast development under cold stres |

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|---|---|---|---|
| Os03g0747700 | DOWN | Os-SAUR15 | Auxin responsive SAUR protein domain containing protein |
| Os03g0748300 | DOWN | Os-SAUR16 | Hypothetical conserved gene |
| Os03g0749300 | UP | Os-SAUR17 | Auxin responsive SAUR protein domain containing protein |
| Os03g0752300 | DOWN | OsPR5 | Similar to Alpha-amylase/trypsin inhibitor (Antifungal protein) |
| Os03g0752400 | DOWN | OsLP | Similar to Thaumatin-like protein |
| Os03g0757100 | UP | TLP | Similar to Osmotin precursor |
| Os03g0759700 | UP | OsNPR3 | Similar to NPR1-like protein |
| Os03g0760200 | UP | OsTHIC | Similar to Thiamine biosynthesis protein thiC |
| Os03g0764000 | UP | - | Hypothetical protein |
| Os03g0764600 | UP | - | Similar to glycosyltransferase family protein 47 |
| Os03g0769100 | DOWN | - | Conserved hypothetical protein |
| Os03g0773300 | DOWN | - | CHCH domain containing protein |
| Os03g0776150 | DOWN | - | Conserved hypothetical protein |
| Os03g0777700 | DOWN | - | Similar to F1N21.17 |
| Os03g0781000 | DOWN | - | Similar to unconventional myosin heavy chain |
| Os03g0783700 | UP | OsOxO3 | Similar to Oxalate oxidase 1 (EC 1.2.3.4) (Germin) |
| Os03g0784600 | DOWN | Osoxo4 | Similar to Oxalate oxidase 1 (EC 1.2.3.4) (Germin) |
| Os03g0789466 | DOWN | - | Similar to predicted protein |
| Os03g0794200 | UP | - | Similar to 30S ribosomal protein S13 |
| Os03g0795200 | DOWN | - | Protein of unknown function DUF292, eukaryotic domain containing protein |
| Os03g0799300 | UP | - | Conserved hypothetical protein |
| Os03g0799700 | DOWN | OsGS1 | Cytosolic glutamine synthetas |
| Os03g0807400 | DOWN | OASB2 | Similar to Anthranilate synthase beta chain |
| Os03g0811100 | DOWN | ACT1 | Actin 1 |
| Os03g0811400 | UP | - | Similar to Physical impedance induced protein |
| Os03g0811800 | UP | - | Alpha/beta hydrolase fold-1 domain containing protein |
| Os03g0815100 | DOWN | OsDDM1b | Chromatin remodeling factor, Genome-wide DNA methylatio |
| Os03g0816200 | UP | OsITPK3 | Similar to Hydroxyproline-rich glycoprotein DZ-HRGP precursor |
| Os03g0816950 | DOWN | ACS1 | ACC synthase, Ethylene biosynthesi |
| Os03g0817200 | UP | OsbHLH084 | Helix-loop-helix DNA-binding domain containing protein |
| Os03g0821900 | DOWN | - | Conserved hypothetical protein |
| Os03g0824100 | DOWN | - | Similar to Proteinase inhibitor type II CEVI57 precursor |
| Os03g0825500 | DOWN | OsGH9A3 | Similar to CEL6=CELLULASE 6 (Fragment) |
| Os03g0826800 | DOWN | - | Protein of unknown function methylase putative domain containing protein |
| Os03g0827700 | DOWN | - | Uncharacterised protein family UPF0114 domain containing protein |
| Os03g0828100 | DOWN | - | Similar to Ripening-associated protein (Fragment) |
| Os03g0828800 | DOWN | - | Conserved hypothetical protein |

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|---|---|---|---|
| Os03g0830800 | UP | - | Similar to photosystem II 11 kDa protein-related |
| Os03g0835100 | DOWN | - | Aldose 1-epimerase family protein |
| Os03g0835150 | UP | OsBGLU1 | Similar to Exoglucanase precursor |
| Os03g0835400 | UP | - | Similar to 50S ribosomal protein l6 |
| Os03g0838800 | UP | TPKA | Two-pore K+ channel family protein, K+ homeostasi |
| Os03g0841100 | DOWN | - | Hypothetical conserved gene |
| Os03g0843400 | DOWN | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os03g0844000 | DOWN | OsbHLH066 | Similar to ER33 protein (Fragment) |
| Os03g0848100 | DOWN | bel | Cytochrome P450 family protein |
| Os03g0851500 | UP | - | Acyl-CoA N-acyltransferase domain containing protein |
| Os03g0852700 | DOWN | - | Homeodomain-like containing protein |
| Os03g0861700 | DOWN | WGL2 | Chloroplast ribosomal protein S9, Early chloroplast developmen |
| Os04g0102500 | UP | - | Protein kinase, core domain containing protein |
| Os04g0103601 | UP | - | Conserved hypothetical protein |
| Os04g0103800 | DOWN | - | Hypothetical protein |
| Os04g0105400 | UP | - | FAR1 DNA binding domain domain containing protein |
| Os04g0111200 | UP | - | Conserved hypothetical protein |
| Os04g0111250 | UP | - | Similar to AP-1 complex subunit sigma-2 |
| Os04g0115700 | UP | - | Conserved hypothetical protein |
| Os04g0118700 | DOWN | OsFLA24 | FAS1 domain domain containing protein |
| Os04g0118800 | DOWN | - | Similar to Protein argonaute MEL1 |
| Os04g0119000 | DOWN | - | Similar to N-acetyltransferase |
| Os04g0120100 | DOWN | OsGDH1 | Similar to Glutamate dehydrogenase (EC 1.4.1.3) (GDH) |
| Os04g0121900 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os04g0126500 | UP | - | Conserved hypothetical protein |
| Os04g0126900 | UP | TSV3 | Obg subfamily of small GTP-binding protein, Chloroplast development at the early leaf stage under cold stres |
| Os04g0127300 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os04g0131850 | DOWN | OsChlD | Magnesium-chelatase subunit ChlD, Chlorophyll synthesis, Chloroplast de-velopmen |
| Os04g0165700 | UP | OsbHLH041 | Similar to DNA binding protein |
| Os04g0169500 | UP | - | Ribosomal protein L36 family protein |
| Os04g0169666 | UP | SNAC1 | Similar to OsNAC6 protein |
| Os04g0179700 | UP | - | Ribosomal protein S26e domain containing protein |
| Os04g0181901 | UP | - | Hypothetical protein |
| Os04g0194433 | UP | OsANT2 | Amino acid transporter, transmembrane domain containing protein |
| Os04g0194500 | DOWN | OsRLCK118 | Similar to Protein kinase APK1A, chloroplast precursor (EC 2.7.1.-) |
| Os04g0202500 | DOWN | OspTAC2 | Pentatricopeptide repeat protein, Regulation of chloroplast developmen |

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|---|---|---|---|
| Os04g0204400 | DOWN | - | Transcription antitermination protein, NusG, N-terminal domain containing protein |
| Os04g0206700 | UP | - | Conserved hypothetical protein |
| Os04g0209200 | UP | OsRH3 | Similar to ATP-dependent RNA helicase |
| Os04g0218600 | DOWN | - | Similar to 50S ribosomal protein L18, chloroplastic |
| Os04g0219600 | DOWN | - | Serine/threonine protein kinase-related domain containing protein |
| Os04g0233400 | DOWN | - | Pectinesterase inhibitor domain containing protein |
| Os04g0247700 | DOWN | - | Similar to Chloroplast protein import component Toc159 |
| Os04g0253000 | DOWN | - | Conserved hypothetical protein |
| Os04g0284900 | UP | - | Similar to Uvs101 |
| Os04g0293100 | DOWN | - | Zinc finger, C2H2 domain containing protein |
| Os04g0293300 | UP | OsWAK28 | Serine/threonine protein kinase-related domain containing protein |
| Os04g0301500 | DOWN | - | Similar to 30S ribosomal protein S6, chloroplast precursor (Fragment) |
| Os04g0304250 | DOWN | OsHOL1 | Methyl chloride transferase |
| Os04g0316200 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os04g0320700 | DOWN | LDC | Similar to Ser/Thr protein phosphatase family protein, expressed |
| Os04g0322100 | UP | OsRad52-2a | Homolog of Rad52 (Radiation sensitive 52), Mediation of homologous recombination and DNA repair |
| Os04g0326300 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os04g0337000 | DOWN | - | Rhodanese-like domain containing protein |
| Os04g0337201 | DOWN | - | Similar to OSIGBa0123D13.3 protein |
| Os04g0339400 | UP | - | Conserved hypothetical protein |
| Os04g0346800 | UP | - | Hypothetical protein |
| Os04g0360500 | UP | Os-COMTL2 | Similar to 0-methyltransferase (EC 2.1.1.6) (Fragment) |
| Os04g0366000 | DOWN | - | Similar to B0616E02-H0507E05.3 protein |
| Os04g0367000 | DOWN | - | Similar to ATP sulfurylase (Fragment) |
| Os04g0368000 | DOWN | - | Conserved hypothetical protein |
| Os04g0369600 | UP | - | Hypothetical protein |
| Os04g0370500 | DOWN | - | Pentatricopeptide repeat domain containing protein |
| Os04g0372700 | DOWN | - | NB-ARC domain containing protein |
| Os04g0372750 | DOWN | - | Similar to H0716A07.5 protein |
| Os04g0376300 | UP | OsSLPP1 | Similar to H0716A07.11 protein |
| Os04g0380300 | DOWN | - | Hypothetical conserved gene |
| Os04g0385600 | DOWN | - | Hypothetical conserved gene |
| Os04g0402100 | UP | - | Hypothetical protein |
| Os04g0404400 | UP | - | Similar to H0124E07.4 protein |
| Os04g0405300 | UP | OsSub38 | Peptidase S8 and S53, subtilisin, kexin, sedolisin domain containing protein |
| Os04g0412300 | DOWN | - | Similar to UDP-glucose:sterol glucosyltransferase |
| Os04g0415200 | UP | OsCAS | Cysteine synthase (EC 2.5.1.47) |
| Os04g0417600 | DOWN | - | Similar to Avr9/Cf-9 rapidly elicited protein 137 |

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|---|---|---|---|
| Os04g0417800 | DOWN | - | Hypothetical protein |
| Os04g0418000 | UP | OsKS4 | 9-beta-pimara-7,15-diene synthase, Momilactone phytoalexins biosynthesis, Defense respons |
| Os04g0418800 | UP | - | Hypothetical conserved gene |
| Os04g0419100 | UP | - | 2OG-Fe(II) oxygenase domain containing protein |
| Os04g0419400 | DOWN | - | Hypothetical gene |
| Os04g0419900 | DOWN | OsABCG8 | Similar to ABC transporter-like protein |
| Os04g0420700 | DOWN | OsRLCK135 | Similar to H0512B01.12 protein |
| Os04g0420801 | DOWN | - | Hypothetical protein |
| Os04g0432600 | UP | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os04g0439400 | DOWN | OsABCC9 | Similar to MRP-like ABC transporter |
| Os04g0442300 | UP | - | Conserved hypothetical protein |
| Os04g0444800 | DOWN | rNBS17 | Similar to NBS-LRR protein (Fragment) |
| Os04g0445700 | DOWN | OsPIP2 | Similar to Arabidopsis thaliana (Fragment) |
| Os04g0448300 | UP | - | Similar to H0315A08.1 protein |
| Os04g0448800 | UP | H1 | Similar to Histone H1 |
| Os04g0452700 | DOWN | - | Similar to OSIGBa0145C02.7 protein |
| Os04g0460300 | UP | - | Similar to Auxin-binding protein ABP20 |
| Os04g0464800 | DOWN | - | Hypothetical protein |
| Os04g0469000 | DOWN | - | Similar to Tropinone reductase-I (EC 1.1.1.206) (TR-I) (Tropine dehydrogenase) |
| Os04g0469700 | DOWN | OsbHLH006 | Helix-loop-helix DNA-binding domain containing protein |
| Os04g0469800 | DOWN | - | Hypothetical protein |
| Os04g0474300 | UP | - | Protein of unknown function DUF26 domain containing protein |
| Os04g0474800 | UP | - | Similar to Glucosyltransferase (Fragment) |
| Os04g0482900 | UP | - | Protein of unknown function DUF26 domain containing protein |
| Os04g0483200 | DOWN | - | Hypothetical conserved gene |
| Os04g0488100 | DOWN | OsSTA120 | Peptidase aspartic, catalytic domain containing protein |
| Os04g0490500 | DOWN | - | Similar to OSIGBa0137O04.8 protein |
| Os04g0494100 | UP | - | Aldo/keto reductase family protein |
| Os04g0494300 | DOWN | OsAKR | Aldo/keto reductase family protein |
| Os04g0511200 | UP | - | Similar to OSIGBa0111I14.3 protein |
| Os04g0513400 | UP | - | Similar to OSIGBa0111E13.1 protein |
| Os04g0514600 | DOWN | - | Similar to OSIGBa0110B10.6 protein |
| Os04g0515400 | UP | - | Hypothetical conserved gene |
| Os04g0517100 | DOWN | OsWAK43 | Serine/threonine protein kinase-related domain containing protein |
| Os04g0517700 | UP | - | Similar to OSIGBa0107E14.3 protein |
| Os04g0519700 | DOWN | Os_F0607 | Similar to OSIGBa0107E14.10 protein |
| Os04g0524600 | DOWN | - | Similar to Quinone-oxidoreductase QR1 (Fragment) |

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|---|---|---|---|
| Os04g0527400 | UP | - | Non-protein coding transcript |
| Os04g0527700 | UP | - | Similar to 3-oxoacyl-reductase |
| Os04g0528800 | UP | OsFbox203 | Kelch-type beta propeller domain containing protein |
| Os04g0535200 | UP | Os_F0796 | Tetratricopeptide-like helical domain containing protein |
| Os04g0535600 | UP | OsCNX | Similar to Calnexin (Fragment) |
| Os04g0538166 | DOWN | OsEnS-64 | Similar to H0502B11.4 protein |
| Os04g0544400 | DOWN | Os-SDR110C-MS3 | Similar to Stem secoisolariciresinol dehydrogenase (Fragment) |
| Os04g0550600 | UP | - | Similar to H0717B12.10 protein |
| Os04g0551700 | DOWN | - | TB2/DP1 and HVA22 related protein family protein |
| Os04g0555300 | DOWN | OsVQ15 | Similar to OSIGBa0092M08.12 protein |
| Os04g0556400 | DOWN | OsWD40-100 | WD40 repeat-like domain containing protein |
| Os04g0556500 | DOWN | - | Conserved hypothetical protein |
| Os04g0557000 | DOWN | - | Similar to Hydroxyproline-rich glycoprotein |
| Os04g0559550 | UP | - | Conserved hypothetical protein |
| Os04g0559700 | UP | - | Conserved hypothetical protein |
| Os04g0559750 | UP | YK18 | Similar to H0525E10.7 protein |
| Os04g0561500 | DOWN | - | Hypothetical protein |
| Os04g0565200 | UP | - | Hypothetical protein |
| Os04g0565500 | DOWN | - | Similar to H0315E07.2 protein |
| Os04g0566600 | UP | - | Similar to H0525C06.6 protein |
| Os04g0571600 | DOWN | OSRR1 | A-type response regulator, Cytokinin signalin |
| Os04g0572200 | DOWN | OsFRO7 | Ferric reductase-like transmembrane component family protein |
| Os04g0572600 | DOWN | - | Similar to OSIGBa0140O07.8 protein |
| Os04g0583700 | DOWN | - | Peptidase A1 domain containing protein |
| Os04g0584600 | DOWN | OsPT17 | Similar to Mitochondrial phosphate transporter (Fragment) |
| Os04g0585900 | UP | OsMST1 | Similar to Monosaccharide transporter 1 |
| Os04g0586500 | DOWN | OsATL13 | Amino acid transporter, transmembrane domain containing protein |
| Os04g0588500 | DOWN | - | Similar to OSIGBa0130P02.2 protein |
| Os04g0597501 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os04g0601700 | UP | - | Hypothetical protein |
| Os04g0601800 | DOWN | D11 | Cytochrome P450 superfamily protein, CYP724B1, Brassinosteroid (BR) bio-synthesis, Control of panicle architecture and seed siz |
| Os04g0604300 | DOWN | Os4bglu9 | Glycoside hydrolase, family 1 protein |
| Os04g0610400 | DOWN | Os4bglu12 | Similar to OSIGBa0135C13.7 protein |
| Os04g0610500 | DOWN | - | Similar to H0525D09.12 protein |
| Os04g0611700 | UP | - | Steroid nuclear receptor, ligand-binding domain containing protein |

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|---|---|---|---|
| Os04g0612000 | UP | OsRad21-2 | Rad21/Rec8 like protein, C-terminal domain containing protein |
| Os04g0614300 | UP | OsRLCK152 | Protein kinase-like domain domain containing protein |
| Os04g0615500 | DOWN | Cht5 | Similar to Chitinase |
| Os04g0616200 | UP | - | Hypothetical gene |
| Os04g0616600 | UP | EFA27 | EFA27 for EF hand, abscisic acid, 27kD |
| Os04g0617200 | DOWN | Os4bglu16 | Similar to Beta-glucosidase |
| Os04g0617500 | DOWN | - | Similar to NBS-LRR type disease resistance protein O2 (Fragment) |
| Os04g0617900 | UP | - | NTP pyrophosphohydrolase MazG, putative catalytic core domain containing protein |
| Os04g0619400 | DOWN | - | Similar to OSIGBa0145M07.3 protein |
| Os04g0619900 | DOWN | OsMyb4 | Similar to OSIGBa0145M07.4 protein |
| Os04g0621500 | DOWN | OsWAK51 | Similar to OSIGBa0145M07.8 protein |
| Os04g0623066 | DOWN | OsARF10 | Similar to Auxin response factor 10 |
| Os04g0629600 | DOWN | OsS40-13 | Protein of unknown function DUF584 family protein |
| Os04g0630600 | DOWN | OsYSL12 | Oligopeptide transporter OPT superfamily protein |
| Os04g0630900 | DOWN | - | BRO1 domain containing protein |
| Os04g0632400 | DOWN | - | CHCH domain containing protein |
| Os04g0636300 | DOWN | - | Similar to Ferredoxin-thioredoxin reductase, variable chain (FTR-V) (Ferredoxin- thioredoxin reductase subunit A) (FTR-A) |
| Os04g0639300 | DOWN | - | Similar to OSIGBa0125M19.13 protein |
| Os04g0643200 | DOWN | - | Peptidase A1 domain containing protein |
| Os04g0644900 | UP | OSINV2 | Similar to Beta-fructofuranosidase 1 precursor (EC 3.2.1.26) (Sucrose 1) (Invertase 1) |
| Os04g0645200 | UP | - | Similar to Elongation factor G, chloroplastic |
| Os04g0647900 | DOWN | - | Hypothetical conserved gene |
| Os04g0648400 | DOWN | HTD1 | Carotenoid cleavage dioxygenase, Negative regulation of the outgrowth of axillary buds, Strigolactones biosynthesi |
| Os04g0651000 | UP | - | PAP fibrillin family protein |
| Os04g0657500 | DOWN | FCO11 | Similar to glycerol 3-phosphate permease |
| Os04g0660600 | UP | - | Similar to UDP-glycosyltransferase UGT93B9 |
| Os04g0664500 | UP | CZOGT1 | cis-Zeatin-O-glucosyltransferase, Catalyze O-glucosylation of cZ and cZ-ribosid |
| Os04g0667600 | DOWN | - | Similar to Genetic modifier |
| Os04g0673300 | UP | - | Conserved hypothetical protein |
| Os04g0674700 | UP | OsPIP1 | Similar to Aquaporin PIP1.1 |
| Os04g0674800 | UP | - | Hypothetical protein |
| Os04g0675200 | DOWN | OsPOP9 | Similar to Prolyl endopeptidase (EC 3.4.21.26) (Post-proline cleaving enzyme) (PE) |
| Os04g0678700 | DOWN | - | Similar to Cis-zeatin O-glucosyltransferase 1 (EC 2.4.1.215) (cisZOG1) |

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|---|---|---|---|
| Os04g0680700 | DOWN | OsANT4 | Similar to OSIGBa0158F05.8 protein |
| Os04g0684500 | DOWN | - | Homeodomain-like containing protein |
| Os04g0684900 | DOWN | - | Multi antimicrobial extrusion protein MatE family protein |
| Os04g0685300 | DOWN | OsERF | - |
| Os04g0687800 | UP | - | Similar to DNA-directed RNA polymerase |
| Os04g0691800 | UP | - | Hypothetical conserved gene |
| Os05g0100100 | UP | - | Zinc finger, FYVE-type domain containing protein |
| Os05g0103800 | UP | Os-CDPK13 | Similar to Calcium dependent protein kinase |
| Os05g0104200 | UP | - | Protein of unknown function DUF581 family protein |
| Os05g0106200 | UP | - | Malectin-like carbohydrate-binding domain domain containing protein |
| Os05g0109825 | DOWN | - | Hypothetical gene |
| Os05g0112800 | UP | - | Similar to OSJNba0093F12.10 protein |
| Os05g0116000 | UP | - | Similar to Vacuolar ATP synthase subunit G 1 (EC 3.6.3.14) (V-ATPase G subunit 1) (Vacuolar proton pump G subunit 1) |
| Os05g0122800 | UP | - | Similar to Plastid protein |
| Os05g0123000 | UP | OsXTH9 | Similar to Xyloglucan endotransglucosylase/hydrolase protein 24 precursor (EC 2.4.1.207) (At-XTH24) (XTH-24) (Meristem protein 5) (MERI-5 protein) (MERI5 protein) (Endo-xyloglucan transferase) (Xyloglucan endo-1,4-beta-D-glucanase) |
| Os05g0126400 | DOWN | ERF77 | APETALA-2-like transcription Factor, Control of the abscisic acid (ABA)/gibberellin (GA) balanc |
| Os05g0127200 | UP | - | Peptidase M24A, methionine aminopeptidase, subfamily 1 protein |
| Os05g0127300 | DOWN | OsKS3 | Similar to Ent-kaurene synthase-like 3 |
| Os05g0127400 | UP | KS2 | Ent-beyerene synthase, Phytoalexin biosynthesis, Defense respons |
| Os05g0127500 | UP | - | Hypothetical conserved gene |
| Os05g0128100 | DOWN | OsISC39 | Similar to H0525G02.2 protein |
| Os05g0131500 | DOWN | OsRLCK159 | Similar to H0525G02.9 protein |
| Os05g0132100 | DOWN | - | Serine/threonine protein kinase-related domain containing protein |
| Os05g0132800 | UP | - | Conserved hypothetical protein |
| Os05g0134400 | UP | - | Similar to H0313F03.4 protein |
| Os05g0135500 | UP | OsGLP4-1 | Similar to germin-like protein subfamily 1 member 11 |
| Os05g0135700 | UP | OsRLCK160 | Protein kinase, core domain containing protein |
| Os05g0137200 | DOWN | - | Similar to H0114G12.10 protein |
| Os05g0142400 | UP | - | Disease resistance protein domain containing protein |
| Os05g0142500 | UP | - | Similar to XA1 |
| Os05g0145100 | UP | GLO3 | Similar to H0215F08.7 protein |
| Os05g0147500 | DOWN | - | Conserved hypothetical protein |
| Os05g0152201 | UP | OsSTA134 | Similar to H0323C08.16 protein |

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|---|---|---|---|
| Os05g0155100 | UP | - | Similar to H0105C05.3 protein |
| Os05g0156500 | UP | - | Hypothetical protein |
| Os05g0156700 | DOWN | - | Similar to H0410G08.15 protein |
| Os05g0157500 | DOWN | - | Conserved hypothetical protein |
| Os05g0165900 | DOWN | - | Amidase family protein |
| Os05g0166450 | UP | Os-NTMC2T2.1 | C2 domain containing protein |
| Os05g0176600 | UP | OsVQ16 | VQ domain containing protein |
| Os05g0179100 | UP | - | Leucine-rich repeat, N-terminal domain containing protein |
| Os05g0179300 | UP | - | Similar to H0811D08.17 protein |
| Os05g0181300 | DOWN | OsGT43I | Similar to H0212B02.9 protein |
| Os05g0181700 | DOWN | PRX57 | Similar to Peroxidase |
| Os05g0184901 | UP | - | Lipase, class 3 family protein |
| Os05g0195101 | DOWN | - | ATPase, V0 complex, subunit E domain containing protein |
| Os05g0195700 | UP | Os-AHT1 | Similar to H1005F08.2 protein |
| Os05g0202800 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os05g0203900 | DOWN | RR6 | A-type response regulator, Cytokinin signalin |
| Os05g0207300 | UP | - | Similar to AMP-binding protein (Adenosine monophosphate binding protein 5 AMPBP5) |
| Os05g0215300 | DOWN | OsGH9C1 | Similar to CEL1=CELLULASE 1 (Fragment) |
| Os05g0222200 | DOWN | - | Similar to H0103C06.6 protein |
| Os05g0226300 | DOWN | OsDof17 | Zinc finger, Dof-type domain containing protein |
| Os05g0226900 | UP | OsPorA | Similar to Protochlorophyllide reductase (EC 1.3.1.33) (PCR) (NADPH- protochlorophyllide oxidoreductase) (POR) (Fragment) |
| Os05g0227600 | UP | - | DNA mismatch repair protein MutS, core domain containing protein |
| Os05g0230700 | DOWN | WSL5 | Pentatricopeptide repeat protein, Chloroplast development under cold stres |
| Os05g0244700 | UP | OsCAF1B | Component of the CCR4-NOTcomplex, Deadenylase, Deadenylation (poly(A) tail shortening), Development and stress respons |
| Os05g0245700 | UP | - | Harpin-induced 1 domain containing protein |
| Os05g0247100 | UP | OsUMA-MIT7 | Protein of unknown function DUF6, transmembrane domain containing protein |
| Os05g0253200 | DOWN | - | C2 domain containing protein |
| Os05g0256100 | DOWN | - | Similar to cDNA clone:006-204-G09, full insert sequence |
| Os05g0256500 | DOWN | - | Conserved hypothetical protein |
| Os05g0275000 | DOWN | PGIP2 | Leucine-rich repeat (LRR) protein, Inhibitor of fungal polygalacturonase, Defence respons |
| Os05g0275100 | DOWN | PGIP1 | Polygalacturonase inhibiting protein, Inhibitor of fungal polygalacturonase, Sheath blight resistanc |
| Os05g0304600 | DOWN | OsUMA-MIT8 | Protein of unknown function DUF6, transmembrane domain containing protein |

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|---|---|---|---|
| Os05g0315100 | DOWN | - | Hypothetical protein |
| Os05g0323400 | UP | - | Protein of unknown function DUF26 domain containing protein |
| Os05g0323900 | UP | - | Cupin, RmlC-type domain containing protein |
| Os05g0349700 | DOWN | OsTET7 | Tetraspanin domain containing protein |
| Os05g0361900 | DOWN | - | Similar to Lateral organ boundaries domain 1 |
| Os05g0362300 | UP | OsGT43A | Glycosyl transferase, family 43 protein |
| Os05g0365300 | DOWN | - | Conserved hypothetical protein |
| Os05g0368300 | UP | OsPLC4 | Similar to Phospholipase C (Fragment) |
| Os05g0369900 | UP | OsCRR3 | Serine/threonine protein kinase domain containing protein |
| Os05g0371166 | UP | OsDjB5 | Similar to DnaJ subfamily B member 13 |
| Os05g0374500 | DOWN | - | Similar to Leucoanthocyanidin dioxygenase-like protein |
| Os05g0377000 | UP | - | Hypothetical conserved gene |
| Os05g0380850 | DOWN | - | Ferroporti-1 domain containing protein |
| Os05g0381500 | DOWN | OsLACS1 | AMP-dependent synthetase and ligase domain containing protein |
| Os05g0388500 | DOWN | - | Conserved hypothetical protein |
| Os05g0390100 | DOWN | PRX65 | Haem peroxidase, plant/fungal/bacterial family protein |
| Os05g0390550 | DOWN | PRX71 | Haem peroxidase family protein |
| Os05g0390800 | DOWN | OsSAMS1 | S-adenosylmethionine synthetase 1 (EC 2.5.1.6) (Methionine adenosyltransferase 1) (AdoMet synthetase 1) |
| Os05g0397300 | DOWN | OsA-BCB17 | Similar to P-glycoprotein ABCB5 |
| Os05g0400400 | UP | Os-MYB2P-1 | R2R3 MYB transcription factor, Regulation of phosphate-starvation responses and root architectur |
| Os05g0402700 | UP | - | Conserved hypothetical protein |
| Os05g0405400 | DOWN | - | Hypothetical conserved gene |
| Os05g0406100 | UP | - | Conserved hypothetical protein |
| Os05g0406200 | UP | OsDegp6 | Similar to DEGP2 (DEGP PROTEASE 2); serine-type peptidase/ trypsin |
| Os05g0411200 | DOWN | - | Conserved hypothetical protein |
| Os05g0414600 | DOWN | RPL18 | Similar to 60S ribosomal protein L18 |
| Os05g0420600 | UP | OsDjB6 | Similar to Apobec-1 binding protein 2 |
| Os05g0423701 | DOWN | - | Similar to Dihydrolipoyl dehydrogenase |
| Os05g0426350 | UP | - | Conserved hypothetical protein |
| Os05g0427100 | DOWN | - | Serine/threonine protein kinase-related domain containing protein |
| Os05g0429400 | DOWN | - | Hypothetical gene |
| Os05g0430400 | DOWN | - | Conserved hypothetical protein |
| Os05g0431700 | UP | - | DVL family protein |
| Os05g0432200 | UP | OsAT7 | Transferase family protein |
| Os05g0438800 | UP | - | Conserved hypothetical protein |
| Os05g0442400 | UP | - | Conserved hypothetical protein |
| Os05g0442700 | DOWN | - | Phospholipase A2, active site domain containing protein |
| Os05g0445900 | DOWN | - | Vegetative storage protein/acid phosphatase domain containing protein |

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|---|---|---|---|
| Os05g0446550 | DOWN | - | Similar to Stem 28 kDa glycoprotein |
| Os05g0449900 | DOWN | - | Non-protein coding transcript |
| Os05g0452500 | DOWN | - | Similar to Transcription factor MYBS2 |
| Os05g0453300 | DOWN | - | Conserved hypothetical protein |
| Os05g0464001 | DOWN | MTd | Similar to Metallothionein-like protein 3B |
| Os05g0464300 | UP | - | Conserved hypothetical protein |
| Os05g0469800 | UP | OsRPL5 | Similar to 60S ribosomal protein L11-2 (L16). Splice isoform 2 |
| Os05g0471000 | DOWN | OsGELP64 | Lipase, GDSL domain containing protein |
| Os05g0471350 | DOWN | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os05g0473500 | DOWN | OsA-BCG12 | ABC transporter-like domain containing protein |
| Os05g0474800 | DOWN | - | Similar to FIP1 |
| Os05g0477600 | DOWN | OsRePRP1.1 | Proline-rich glycoprotein, ABA-dependent inhibition of root growt |
| Os05g0482501 | UP | OsRePRP1.2 | Proline-rich glycoprotein, ABA-dependent inhibition of root growt |
| Os05g0488600 | UP | OsIAA17 | Similar to Auxin-responsive protein IAA17 |
| Os05g0494000 | UP | OsAT-IV | Aminotransferase, class IV family protein |
| Os05g0495600 | DOWN | Os-miR1425 | Hypothetical protein |
| Os05g0498900 | DOWN | DIP3 | Similar to Glycosyl hydrolases family 18 |
| Os05g0506200 | DOWN | - | Conserved hypothetical protein |
| Os05g0506500 | UP | - | Similar to SHR5-receptor-like kinase (Fragment) |
| Os05g0506800 | UP | - | Protein kinase, catalytic domain domain containing protein |
| Os05g0511700 | DOWN | - | Pentatricopeptide repeat domain containing protein |
| Os05g0514600 | UP | OsPPR920 | Pentatricopeptide repeat domain containing protein |
| Os05g0514800 | UP | OsLOX7 | Similar to Lipoxygenase (Fragment) |
| Os05g0515600 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os05g0518600 | UP | - | Hypothetical protein |
| Os05g0519600 | DOWN | SODA1 | Manganese superoxide dismutase, Heat-stress toleranc |
| Os05g0521700 | DOWN | YGL1 | Chl synthase, Chl biosynthesi |
| Os05g0526600 | DOWN | UspA | UspA domain containing protein |
| Os05g0527000 | UP | - | Mitochondrial carrier protein domain containing protein |
| Os05g0533800 | UP | - | Protein of unknown function DUF538 family protein |
| Os05g0535700 | UP | OsBBR1 | Nucleotide-binding site leucine-rich repeat (NBS-LRR) protein, Bacterial blight resistanc |
| Os05g0535800 | DOWN | - | Conserved hypothetical protein |
| Os05g0541301 | UP | RPS4 | Similar to 40S ribosomal protein S4, X isoform (Single copy abundant mRNA protein) (SCR10) |
| Os05g0549800 | DOWN | OsEXO70FX1 | Exo70 exocyst complex subunit domain containing protein |

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|---|---|---|---|
| Os05g0555600 | DOWN | - | Non-protein coding transcript |
| Os05g0555900 | UP | OsBON3 | Similar to predicted protein |
| Os05g0557400 | DOWN | OsDJC31 | Tetratricopeptide-like helical domain containing protein |
| Os05g0562000 | DOWN | - | Similar to Acyl carrier protein |
| Os05g0563400 | DOWN | - | Hypothetical protein |
| Os05g0563600 | UP | - | Similar to predicted protein |
| Os05g0567300 | DOWN | OsANN3 | Similar to Annexin-like protein RJ4 |
| Os05g0574400 | UP | - | Similar to 50S ribosomal protein L1 |
| Os05g0574800 | DOWN | - | Dynamin family protein |
| Os05g0575300 | DOWN | - | Conserved hypothetical protein |
| Os05g0575800 | DOWN | OsVQ19 | Similar to VQ motif family protein |
| Os05g0578500 | UP | - | Conserved hypothetical protein |
| Os05g0582300 | DOWN | - | Similar to Ubiquinol-cytochrome c reductase complex 8.0 kDa protein (EC 1.10.2.2) |
| Os05g0584400 | UP | GSC | Similar to Fructose-bisphosphate aldolase, cytoplasmic isozyme (EC 4.1.2.13) |
| Os05g0586900 | DOWN | - | Hypothetical conserved gene |
| Os05g0587300 | DOWN | - | Inosine/uridine-preferring nucleoside hydrolase domain containing protein |
| Os05g0594200 | DOWN | - | Non-protein coding transcript |
| Os05g0594500 | DOWN | TCD5 | Similar to electron carrier/ oxidoreductase |
| Os06g0103500 | UP | - | Conserved hypothetical protein |
| Os06g0105400 | UP | OsCc1 | Cytochrome c |
| Os06g0106800 | UP | - | Similar to Endoglucanase 3 |
| Os06g0111300 | DOWN | - | Hypothetical protein |
| Os06g0111500 | UP | - | Octicosapeptide/Phox/Bem1p domain containing protein |
| Os06g0113900 | DOWN | - | Phosphatidylinositol transfer protein-like, N-terminal domain containing protein |
| Os06g0115400 | DOWN | - | GTP1/OBG domain containing protein |
| Os06g0116400 | DOWN | - | Similar to peptide transporter PTR2-B |
| Os06g0116500 | DOWN | - | Similar to Gibberellin-regulated protein 2 precursor |
| Os06g0126500 | UP | - | Similar to Actin 1 |
| Os06g0128600 | DOWN | MID1 | R-R-type MYB-like transcription factor, Response to drought stress during reproductive developmen |
| Os06g0129400 | UP | ONAC012 | No apical meristem (NAM) protein domain containing protein |
| Os06g0132400 | DOWN | ROS1c | 5-methylcytosine DNA glycosylase/lyase, Demethylation of retrotransposon Tos17, Promotion of Tos17 transposition, Seed developmen |
| Os06g0133200 | UP | ROS1D | Similar to DNA glycosylase/lyase 701 |
| Os06g0133900 | UP | - | Homeodomain-like containing protein |
| Os06g0137600 | DOWN | - | Conserved hypothetical protein |
| Os06g0138600 | DOWN | - | Conserved hypothetical protein |
| Os06g0140700 | UP | - | Conserved hypothetical protein |
| Os06g0146100 | DOWN | - | Conserved hypothetical protein |

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|---|---|---|---|
| Os06g0146600 | UP | - | Pyruvate decarboxylase (EC 4.1.1.1) (Fragment) |
| Os06g0146800 | UP | - | Similar to Ser-thr protein kinase (Fragment) |
| Os06g0146900 | UP | OsGRL11 | Similar to electron transporter |
| Os06g0149100 | DOWN | OsZIP5 | Similar to Metal transport protein |
| Os06g0150400 | UP | OsEXO70 B3 | Exo70 exocyst complex subunit family protein |
| Os06g0156600 | UP | OsWRKY7 0 | WRKY transcription factor 70 |
| Os06g0163200 | DOWN | OsEXP4 | Alpha-expansin OsEXPA4 |
| Os06g0164500 | UP | - | Hypothetical conserved gene |
| Os06g0166500 | DOWN | - | Similar to Phosphate starvation regulator protein (Regulatory protein of P-starvation acclimation response Psr1) |
| Os06g0167150 | UP | OsC3'H1 | p-Coumaroyl ester 3-hydroxylase, Determination of lignin content, composition and the degree of cell wall cross-linkin |
| Os06g0167200 | UP | osACA7 | Similar to autoinhibited calcium ATPase |
| Os06g0167400 | UP | OsRLCK1 89 | Serine/threonine protein kinase domain containing protein |
| Os06g0172000 | DOWN | - | KOW domain containing protein |
| Os06g0175900 | UP | OsGELP69 | Conserved hypothetical protein |
| Os06g0177000 | UP | OsGELP72 | Hypothetical conserved gene |
| Os06g0180666 | UP | - | Putative rRNA methylase family protein |
| Os06g0183700 | DOWN | GA2OX4 | GA 2-oxidase4, GA metabolis |
| Os06g0187950 | DOWN | - | Hypothetical conserved gene |
| Os06g0191800 | UP | ZRP4 | Similar to O-methyltransferase ZRP4 (EC 2.1.1.- |
| Os06g0192800 | DOWN | OsFTL10 | Similar to ZCN12 protein |
| Os06g0194900 | UP | OsTPS1 | Similar to SL-TPS/P |
| Os06g0199100 | DOWN | OsDJ-1D | Similar to 4-methyl-5(B-hydroxyethyl)-thiazol monophosphate biosynthesis enzyme |
| Os06g0200350 | DOWN | - | Conserved hypothetical protein |
| Os06g0200700 | DOWN | - | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os06g0202900 | DOWN | OsUGT70 6C3 | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os06g0203000 | DOWN | - | Similar to hydrogen-transporting ATP synthase, rotational mechanism |
| Os06g0205250 | UP | - | Conserved hypothetical protein |
| Os06g0206900 | UP | - | Similar to F14O23.10 protein |
| Os06g0207950 | DOWN | - | Hypothetical gene |
| Os06g0208151 | DOWN | OsMYB86-L2 | Similar to Myb-related protein |
| Os06g0215600 | UP | AP2/EREB P | - |
| Os06g0217700 | DOWN | OsGLT2 | Similar to Glutamate synthase [NADH], amyloplastic |

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|---|---|---|---|
| Os06g0218900 | DOWN | - | Non-protein coding transcript |
| Os06g0219400 | DOWN | - | Membrane attack complex component/perforin/complement C9 family protein |
| Os06g0220000 | UP | - | Conserved hypothetical protein |
| Os06g0220500 | UP | OsARF15 | Similar to Auxin response factor 5 |
| Os06g0226000 | UP | OsFLA6 | FAS1 domain domain containing protein |
| Os06g0228500 | UP | - | Protein of unknown function DUF561 family protein |
| Os06g0230000 | UP | - | Similar to GTP-binding protein era |
| Os06g0233800 | UP | - | Similar to 50S ribosomal protein L12, chloroplast precursor (CL12) |
| Os06g0239100 | DOWN | - | Similar to Malate dehydrogenase |
| Os06g0241100 | UP | OsPPR6 | Hypothetical conserved gene |
| Os06g0243100 | UP | - | Similar to Translation initiation factor IF-2 |
| Os06g0244000 | UP | - | Hypothetical conserved gene |
| Os06g0245800 | DOWN | OsCCR23 | NAD(P)-binding domain containing protein |
| Os06g0246200 | DOWN | OsSPS2 | Similar to prenyl transferase |
| Os06g0248500 | DOWN | - | Conserved hypothetical protein |
| Os06g0253350 | UP | - | Hypothetical conserved gene |
| Os06g0253600 | DOWN | - | Molecular chaperone, heat shock protein, Hsp40, DnaJ domain containing protein |
| Os06g0255900 | DOWN | OsCAX1b | Similar to Cation/proton exchanger 1a |
| Os06g0256500 | UP | - | Invasin/intimin cell-adhesion domain containing protein |
| Os06g0266800 | DOWN | ACX1 | Similar to Acyl-coenzyme A oxidase 1, peroxisomal (EC 1.3.3.6) (AOX 1) (Long- chain acyl-CoA oxidase) (AtCX1) |
| Os06g0272700 | DOWN | - | Similar to dihydrolipoamide S-acetyltransferase |
| Os06g0284500 | DOWN | - | Similar to glycoside hydrolase, family 28 |
| Os06g0289300 | UP | - | Hypothetical conserved gene |
| Os06g0292400 | DOWN | Os6PGDH 1 | Cytosolic 6-phosphogluconate dehydrogenase |
| Os06g0294600 | UP | - | Major facilitator superfamily, general substrate transporter domain containing protein |
| Os06g0295900 | DOWN | OsFSD1.1 | Similar to Superoxide dismutase [Fe], chloroplast (EC 1.15.1.1) (Fragment) |
| Os06g0306300 | DOWN | ZN | Nickel/cobalt transporter, high-affinity domain containing protein |
| Os06g0314501 | DOWN | - | Pleckstrin homology-type domain containing protein |
| Os06g0316800 | DOWN | OsBAG3 | Ubiquitin domain containing protein |
| Os06g0326400 | DOWN | - | Ankyrin repeat containing protein |
| Os06g0329900 | DOWN | OsSPX-MFS3 | Splicing variant of SPX-MFS protein |
| Os06g0334100 | DOWN | ChlM | Similar to Magnesium-protoporphyrin O-methyltransferase (EC 2.1.1.11) (Magnesium- protoporphyrin IX methyltransferase) |
| Os06g0335950 | DOWN | - | Conserved hypothetical protein |
| Os06g0346300 | UP | EPSPS | 5-enolpyruvylshikimate-3-phosphate synthas |

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|---|---|---|---|
| Os06g0367100 | DOWN | - | K homology-like, alpha/beta domain containing protein |
| Os06g0483500 | DOWN | - | Protein of unknown function DUF248, methyltransferase putative domain containing protein |
| Os06g0494400 | DOWN | Oshox2 | Similar to Homeodomain leucine zipper protein (Fragment) |
| Os06g0498900 | DOWN | Pi9(t) | NB-ARC domain containing protein |
| Os06g0505202 | DOWN | - | Hypothetical protein |
| Os06g0505700 | UP | - | Conserved hypothetical protein |
| Os06g0521900 | DOWN | - | Hypothetical protein |
| Os06g0536800 | DOWN | OsGELP75 | Similar to mRNA, clone: RTFL01-05-E01 |
| Os06g0538900 | UP | - | Conserved hypothetical protein |
| Os06g0542300 | DOWN | OsGELP77 | Lipase, GDSL domain containing protein |
| Os06g0547400 | UP | OsWRKY113 | Similar to WRKY transcription factor 63 |
| Os06g0551800 | DOWN | OsPOP11 | Esterase/lipase/thioesterase domain containing protein |
| Os06g0557700 | DOWN | - | Conserved hypothetical protein |
| Os06g0558766 | DOWN | OsIAA20 | Similar to Auxin-responsive protein IAA20 (Indoleacetic acid-induced protein 20) |
| Os06g0563000 | UP | - | Hypothetical gene |
| Os06g0564700 | UP | - | Similar to RING-H2 finger protein ATL1R (RING-H2 finger protein ATL8) |
| Os06g0567900 | UP | - | Di-trans-poly-cis-decaprenylcistransferase family protein |
| Os06g0569500 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os06g0569900 | DOWN | - | Similar to Cytochrome b-c1 complex subunit 8 |
| Os06g0577350 | UP | - | Similar to Cytochrome b-c1 complex subunit 8 |
| Os06g0579800 | UP | - | Hypothetical gene |
| Os06g0581500 | DOWN | - | Hypothetical conserved gene |
| Os06g0587900 | DOWN | - | Hypothetical protein |
| Os06g0591400 | UP | OsGLR4.8 | Hypothetical conserved gene |
| Os06g0592200 | UP | Os-CYP709C11 | Cytochrome P450 family protein |
| Os06g0592400 | UP | - | Similar to RING-H2 finger protein ATL1R (RING-H2 finger protein ATL8) |
| Os06g0593100 | UP | SUS2 | Sucrose synthase 2 (EC 2.4.1.13) |
| Os06g0605900 | DOWN | - | Helix-turn-helix, AraC type, subdomain 2 domain containing protein |
| Os06g0606700 | UP | - | Conserved hypothetical protein |
| Os06g0612900 | DOWN | - | Hypothetical protein |
| Os06g0622000 | DOWN | OsRLCK203 | Serine/threonine protein kinase domain containing protein |
| Os06g0626600 | UP | - | Hypothetical protein |
| Os06g0632200 | UP | - | Conserved hypothetical protein |
| Os06g0634700 | DOWN | - | Conserved hypothetical protein |
| Os06g0638700 | DOWN | - | Hypothetical gene |

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|---|---|---|---|
| Os06g0639500 | DOWN | - | Similar to quinone oxidoreductase |
| Os06g0642500 | DOWN | OsOPR5 | Similar to Oxo-phytodienoic acid reductase |
| Os06g0644400 | DOWN | - | Conserved hypothetical protein |
| Os06g0645901 | DOWN | - | Similar to predicted protein |
| Os06g0648200 | DOWN | - | GDP-fucose protein O-fucosyltransferase domain containing protein |
| Os06g0649000 | DOWN | - | Similar to Phi-1 protein |
| Os06g0656300 | DOWN | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os06g0662200 | UP | - | Similar to Transposase (Fragment) |
| Os06g0664200 | DOWN | OsATL12 | Amino acid transporter, transmembrane domain containing protein |
| Os06g0671600 | DOWN | - | Hypothetical conserved gene |
| Os06g0671700 | DOWN | - | Conserved hypothetical protein |
| Os06g0675700 | UP | - | Peptidase M10A and M12B, matrixin and adamalysin family protein |
| Os06g0676400 | UP | - | Protein kinase, core domain containing protein |
| Os06g0697000 | UP | - | Non-protein coding transcript |
| Os06g0697600 | UP | - | Similar to anthranilic acid methyltransferase 3 |
| Os06g0698600 | DOWN | - | Similar to Alanyl-tRNA synthetase |
| Os06g0698674 | UP | - | Similar to Formin-like protein 14 |
| Os06g0698748 | DOWN | OsPUB39 | U box domain containing protein |
| Os06g0704800 | DOWN | - | Hypothetical gene |
| Os06g0705400 | UP | - | Similar to secretory protein-like |
| Os06g0705600 | UP | OsEXO70 F5 | Conserved hypothetical protein |
| Os06g0707400 | DOWN | Pgi2(Pgib) | Similar to Glucose-6-phosphate isomerase |
| Os06g0710700 | UP | OsGSR1 | Similar to Gibberellin-stimulated protein |
| Os06g0715500 | UP | - | Similar to OSIGBa0139J17.1 protein |
| Os06g0724800 | UP | OsTBL64 | Protein of unknown function DUF231, plant domain containing protein |
| Os06g0725000 | UP | OsDof20 | Zinc finger, Dof-type family protein |
| Os06g0725300 | UP | - | Hypothetical conserved gene |
| Os06g0726100 | UP | - | Embryogenesis transmembrane protein |
| Os06g0728700 | UP | - | Cytochrome P450 family protein |
| Os06g0729500 | DOWN | - | Hypothetical conserved gene |
| Os06g0729800 | DOWN | PRX78 | Haem peroxidase domain containing protein |
| Os06g0729900 | DOWN | - | Conserved hypothetical protein |
| Os06g0731200 | DOWN | - | Similar to Glycine-rich protein (Fragment) |
| Os06g0731300 | DOWN | OsPFPA2 | Phosphofructokinase domain containing protein |
| Os06g0731600 | DOWN | - | SAM dependent carboxyl methyltransferase family protein |
| Os07g0100300 | DOWN | - | Hypothetical gene |
| Os07g0103000 | UP | OsXTH15 | Concanavalin A-like lectin/glucanase domain containing protein |
| Os07g0103100 | UP | - | Non-protein coding transcript |
| Os07g0107300 | UP | - | Similar to ACX4 (ACYL-COA OXIDASE 4); acyl-CoA oxidase/ oxidoreductase |
| Os07g0114000 | DOWN | - | Similar to Xylanase inhibitor protein I precursor |

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|---|---|---|---|
| Os07g0117900 | UP | - | Glycoside hydrolase, subgroup, catalytic core domain containing protein |
| Os07g0120700 | DOWN | - | Similar to H0124B04.15 protein |
| Os07g0129200 | UP | - | Multi antimicrobial extrusion protein MatE family protein |
| Os07g0132001 | UP | - | GTP-binding protein, HSR1-related domain containing protein |
| Os07g0133100 | DOWN | - | Hypothetical conserved gene |
| Os07g0137500 | DOWN | OsAGP26 | Similar to AGP16 |
| Os07g0147700 | DOWN | PRX82 | Plant peroxidase domain containing protein |
| Os07g0147800 | DOWN | - | Hypothetical protein |
| Os07g0152500 | DOWN | - | Protein of unknown function DUF538 domain containing protein |
| Os07g0158300 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os07g0158400 | UP | prx86 | Similar to Peroxidase P7 (EC 1.11.1.7) (TP7) |
| Os07g0159200 | UP | - | Bulb-type lectin domain domain containing protein |
| Os07g0160600 | UP | - | Protein kinase, catalytic domain domain containing protein |
| Os07g0162400 | UP | - | Similar to predicted protein |
| Os07g0168000 | DOWN | OsMIOX | Myo-inositol oxygenase, Drought stress toleranc |
| Os07g0176600 | UP | - | Ndr family protein |
| Os07g0181100 | DOWN | - | Similar to Cysteine synthase (EC 4.2.99.8) |
| Os07g0182100 | UP | AO | L-ascorbate oxidase, Cold, salt, drought stress respons |
| Os07g0185000 | UP | KO4 | Ent-kaurene oxidase, Diterpenoid phytoalexin biosynthesi |
| Os07g0188233 | DOWN | OsKO1 | Similar to Ent-kaurene oxidase 1 (Fragment) |
| Os07g0188249 | DOWN | - | Hypothetical protein |
| Os07g0195300 | UP | - | Conserved hypothetical protein |
| Os07g0207400 | UP | - | Hypothetical conserved gene |
| Os07g0208000 | UP | - | Protein kinase, core domain containing protein |
| Os07g0213300 | DOWN | - | Hypothetical conserved gene |
| Os07g0215200 | UP | - | Conserved hypothetical protein |
| Os07g0218200 | UP | - | Hypothetical protein |
| Os07g0229700 | DOWN | OsALDH2B2 | Similar to Cytosolic aldehyde dehydrogenase RF2C |
| Os07g0236700 | UP | - | Similar to UDP-galactose/UDP-glucose transporter |
| Os07g0240300 | UP | OsFbox316 | Leucine-rich repeat, cysteine-containing subtype containing protein |
| Os07g0246200 | UP | - | Tetratricopeptide-like helical domain containing protein |
| Os07g0263400 | UP | - | Similar to predicted protein |
| Os07g0275100 | DOWN | OsCW-ZF6 | Zinc finger, CW-type domain containing protein |
| Os07g0282300 | DOWN | - | Sulfotransferase family protein |
| Os07g0283125 | UP | TS | Similar to tryptophan synthase-related |
| Os07g0287000 | DOWN | - | Conserved hypothetical protein |
| Os07g0297400 | UP | OsCYL2 | Putative cyclase family protein |
| Os07g0416700 | DOWN | - | Protein kinase, core domain containing protein |

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|---|---|---|---|
| Os07g0418500 | UP | - | Cytochrome P450 domain containing protein |
| Os07g0421932 | DOWN | - | Non-protein coding transcript |
| Os07g0438500 | DOWN | - | Similar to Transcription initiation factor TFIID subunit 1 |
| Os07g0438700 | UP | - | Conserved hypothetical protein |
| Os07g0445600 | UP | WRKY28 | PAMP (pathogen-associated molecular pattern)-responsive transrepressor, Defense respons |
| Os07g0448800 | UP | - | Uncharacterised protein family UPF0497, trans-membrane plant subgroup domain containing protein |
| Os07g0449100 | UP | OsbZIP52 | Basic leucine zipper (bZIP) transcription factor, Negative regulator of cold and drought stress respons |
| Os07g0450000 | UP | - | Inositol monophosphatase/Fructose-1,6-bisphosphatase domain containing protein |
| Os07g0452801 | DOWN | Os-SAUR26 | Beta tubulin, autoregulation binding site domain containing protein |
| Os07g0464200 | DOWN | - | Similar to toprim domain-containing protein |
| Os07g0464600 | DOWN | - | Similar to High pI alpha-glucosidase |
| Os07g0469200 | DOWN | - | Conserved hypothetical protein |
| Os07g0471300 | DOWN | - | Similar to 50S ribosomal protein L24, chloroplast precursor (CL24) |
| Os07g0471900 | UP | OsXTH10 | Similar to Xyloglucan endo-transglucosylase/hydrolase 1 |
| Os07g0480300 | UP | - | ATPase, AAA-type, core domain containing protein |
| Os07g0490400 | DOWN | OsEXO70 G2 | Exo70 exocyst complex subunit family protein |
| Os07g0491500 | DOWN | - | eIF4-gamma/eIF5/eIF2-epsilon domain containing protein |
| Os07g0492000 | UP | - | Similar to cDNA clone:J023083M02, full insert sequence |
| Os07g0496250 | UP | - | Tautomerase domain containing protein |
| Os07g0498400 | DOWN | - | Conserved hypothetical protein |
| Os07g0510400 | DOWN | OsHAC70 4 | Probable histone acetyltransferase HAC-like 2 |
| Os07g0511500 | DOWN | OsLTP2.6 | Hypothetical conserved gene |
| Os07g0515200 | UP | - | Oligopeptide transporter domain containing protein |
| Os07g0518500 | DOWN | - | Similar to NBS-LRR disease resistance protein homologue |
| Os07g0519600 | UP | - | Conserved hypothetical protein |
| Os07g0523100 | DOWN | - | Similar to Benzoyl coenzyme A: benzyl alcohol benzoyl transferase (Benzoyl-CoA:benzyl alcohol/phenylethanol benzoyltransferase) |
| Os07g0523150 | DOWN | - | Similar to Translocon-associated protein alpha subunit precursor (TRAP-alpha) (Signal sequence receptor alpha subunit) (SSR-alpha) |
| Os07g0524900 | UP | - | Similar to Chaperone protein dnaJ |
| Os07g0527000 | DOWN | OsbHLH1 55 | Basic helix-loop-helix dimerisation region bHLH domain containing protein |
| Os07g0528200 | DOWN | OsStr9 | Similar to Senescence-associated protein DIN1 |
| Os07g0530400 | DOWN | - | Barwin-related endoglucanase domain containing protein |

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|---|---|---|---|
| Os07g0534000 | DOWN | Cht3* | Similar to Seed chitinase-c |
| Os07g0534300 | UP | - | Homeodomain-like containing protein |
| Os07g0534700 | UP | - | Protein of unknown function DUF789 domain containing protein |
| Os07g0539300 | UP | OsIPT10 | Hypothetical gene |
| Os07g0545800 | DOWN | - | Similar to LysM domain containing protein |
| Os07g0548300 | DOWN | OsA-BCG16 | Similar to ABC transporter-like protein |
| Os07g0550500 | UP | - | Surface protein from Gram-positive cocci, anchor region domain containing protein |
| Os07g0558100 | UP | - | ARID/BRIGHT DNA-binding domain domain containing protein |
| Os07g0560100 | DOWN | SQD2.1 | Conserved hypothetical protein |
| Os07g0565400 | DOWN | - | Similar to GRF zinc finger family protein, expressed |
| Os07g0565600 | DOWN | OsGLR3.6 | Similar to Glutamate receptor 3.4 precursor (Ligand-gated ion channel 3.4) (AtGLR4). Splice isoform 2 |
| Os07g0566150 | DOWN | - | Plant disease resistance response protein family protein |
| Os07g0567700 | DOWN | - | Conserved hypothetical protein |
| Os07g0572100 | UP | OsPP2C61 | Similar to Protein phosphatase 2C-like |
| Os07g0573200 | DOWN | - | NB-ARC domain containing protein |
| Os07g0573700 | DOWN | - | Conserved hypothetical protein |
| Os07g0573900 | DOWN | PR1A | Pathogenesis-related 1a protein, Regulation of abiotic stress response |
| Os07g0577700 | UP | - | Non-protein coding transcript |
| Os07g0578333 | DOWN | - | Concanavalin A-like lectin/glucanase, subgroup domain containing protein |
| Os07g0586200 | DOWN | - | Transposase, MuDR, plant domain containing protein |
| Os07g0587500 | DOWN | PsbR | Similar to Photosystem II 10 kDa polypeptide, chloroplast precursor |
| Os07g0590600 | DOWN | - | ATPase, BadF/BadG/BcrA/BcrD type domain containing protein |
| Os07g0593400 | UP | - | Hypothetical conserved gene |
| Os07g0597400 | UP | - | Similar to H0315A08.1 protein |
| Os07g0607400 | UP | - | Similar to RNA binding protein |
| Os07g0614000 | DOWN | - | Hypothetical conserved gene |
| Os07g0614700 | UP | - | Conserved hypothetical protein |
| Os07g0616200 | DOWN | OsFLA16 | FAS1 domain domain containing protein |
| Os07g0617800 | UP | OsCDAP1 | Alpha/beta hydrolase fold-3 domain containing protein |
| Os07g0619100 | DOWN | - | Similar to Polyribonucleotide phophorylase (Fragment) |
| Os07g0621600 | UP | OsNek3 | Serine/threonine protein kinase, Never-in-mitosis A (NIMA)-related kinase, Pollen germinatio |
| Os07g0622700 | UP | SLAC | C4-dicarboxylate transporter/malic acid transport protein family protein |
| Os07g0625400 | UP | OsTSA | Similar to Tryptophan synthase alpha chain |
| Os07g0626700 | DOWN | OsWNK3 | Similar to MAP kinase (Ser/Thr kinase) |
| Os07g0626800 | DOWN | - | Conserved hypothetical protein |
| Os07g0627100 | UP | - | Non-protein coding transcript |

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|---|---|---|---|
| Os07g0628700 | DOWN | OsFbox347 | Hypothetical conserved gene |
| Os07g0631300 | UP | - | Similar to RF12 protein (Fragment) |
| Os07g0631900 | DOWN | - | Similar to 40S ribosomal protein S15A |
| Os07g0638400 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os07g0642200 | UP | - | Conserved hypothetical protein |
| Os07g0642800 | DOWN | TPS3 | Similar to terpene synthase 7 |
| Os07g0643400 | UP | OsTFIIS | Similar to DNA-directed RNA polymerase I subunit 12 (EC 2.7.7.6) (Nuclear RNA polymerase I small specific subunit Rpa12) (Zinc ribbon domain containing protein 1) |
| Os07g0643700 | UP | OsDof21 | Zinc finger, Dof-type domain containing protein |
| Os07g0643800 | UP | - | Similar to OSIGBa0153E02-OSIGBa0093I20.13 protein |
| Os07g0645000 | UP | CRO1 | Similar to Calreticulin (Fragment) |
| Os07g0646100 | UP | - | Similar to oxidoreductase family protein |
| Os07g0650100 | UP | - | Similar to predicted protein |
| Os07g0656900 | UP | OsAAO3 | Similar to Aldehyde oxidase 1 homolog (Fragment) |
| Os07g0664400 | UP | - | Similar to lectin-like receptor kinase 7 |
| Os07g0669200 | DOWN | OsFbox367 | Cyclin-like F-box domain containing protein |
| Os07g0669250 | DOWN | - | Conserved hypothetical protein |
| Os07g0669700 | DOWN | OsFAD2-4 | Conserved hypothetical protein |
| Os07g0669800 | DOWN | Os-CYP709C9 | Similar to Cytochrome P450 |
| Os07g0673400 | DOWN | OsRePRP2.2 | Proline-rich glycoprotein, ABA-dependent inhibition of root growt |
| Os07g0674100 | UP | - | Hypothetical gene |
| Os07g0676900 | UP | OsCesA3 | Similar to Cellulose synthase-7 |
| Os07g0677500 | DOWN | - | Octicosapeptide/Phox/Bem1p domain containing protein |
| Os07g0680400 | DOWN | - | Hypothetical conserved gene |
| Os07g0680600 | DOWN | - | Conserved hypothetical protein |
| Os07g0680800 | DOWN | OsPIP2a | Aquaporin |
| Os07g0681400 | DOWN | - | Similar to Light induced protein like |
| Os07g0686400 | DOWN | - | Similar to 60S ribosomal protein L44 |
| Os07g0689400 | DOWN | - | Conserved hypothetical protein |
| Os07g0689950 | DOWN | - | Similar to O-methyltransferase ZRP4 |
| Os07g0690900 | DOWN | OsA-BCB26 | ABC transporter-like domain containing protein |
| Os07g0691800 | UP | - | Similar to predicted protein |
| Os07g0694700 | UP | OsAGO18 | Similar to Protein argonaute 18 |
| Os07g0695400 | DOWN | OsbHLH077 | Helix-loop-helix DNA-binding domain containing protein |

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|---|---|---|---|
| Os08g0106300 | UP | - | Hypothetical conserved gene |
| Os08g0110400 | DOWN | OsFKBP20-2 | Peptidyl-prolyl cis-trans isomerase, FKBP-type domain containing protein |
| Os08g0111300 | DOWN | - | Hypothetical conserved gene |
| Os08g0112300 | UP | OsNDPK1 | Nucleoside diphosphate kinase, Cell elongation process in coleoptil |
| Os08g0113100 | UP | - | Similar to Expansin-like B1 |
| Os08g0117100 | DOWN | - | Leucine-rich repeat, typical subtype domain containing protein |
| Os08g0137900 | DOWN | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os08g0138100 | DOWN | - | Hypothetical protein |
| Os08g0138700 | UP | - | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os08g0138900 | UP | - | Conserved hypothetical protein |
| Os08g0153900 | UP | - | Similar to taxane 10-beta-hydroxylase |
| Os08g0154300 | DOWN | - | Similar to taxane 10-beta-hydroxylase |
| Os08g0155400 | UP | - | Similar to 60S ribosomal protein L44 |
| Os08g0158200 | UP | - | Similar to 60S ribosomal protein L44 |
| Os08g0162800 | UP | - | Protein of unknown function DUF6, transmembrane domain containing protein |
| Os08g0173300 | DOWN | - | Similar to nodulin-like protein |
| Os08g0175600 | DOWN | - | Conserved hypothetical protein |
| Os08g0176200 | DOWN | Os_F0782 | Ribosomal protein S14, conserved site domain containing protein |
| Os08g0182400 | UP | - | Similar to permeases of the major facilitator superfamily |
| Os08g0183900 | DOWN | - | Hypothetical conserved gene |
| Os08g0185300 | UP | - | Serine/threonine protein kinase-related domain containing protein |
| Os08g0185701 | DOWN | - | Similar to hydrolase, hydrolyzing O-glycosyl compounds |
| Os08g0186200 | DOWN | Gns13 | Glycoside hydrolase, family 17 protein |
| Os08g0187800 | UP | CIGR1 | Similar to Chitin-inducible gibberellin-responsive protein |
| Os08g0189500 | UP | - | Hypothetical conserved gene |
| Os08g0191100 | UP | - | Hypothetical conserved gene |
| Os08g0191433 | DOWN | OsMyb7 | Similar to Myb-related transcription factor LBM1 |
| Os08g0191900 | DOWN | - | Conserved hypothetical protein |
| Os08g0201100 | UP | - | Similar to SRF8 (STRUBBELIG-RECEPTOR FAMILY 8) |
| Os08g0202300 | DOWN | OsCYP37 | Similar to predicted protein |
| Os08g0203300 | DOWN | - | Hypothetical conserved gene |
| Os08g0203400 | DOWN | - | Similar to SCARECROW |
| Os08g0206700 | DOWN | DAO | Similar to Amine oxidase like protein (EC 1.4.3.6) (Copper amine oxidase) |
| Os08g0215300 | DOWN | - | Similar to F20D23.3 protein |
| Os08g0224300 | DOWN | - | Similar to Adenylyl-sulfate kinase |
| Os08g0229601 | DOWN | - | Nucleotide-sugar transporter family protein |
| Os08g0232700 | DOWN | OsAGP27 | Hypothetical conserved gene |
| Os08g0240200 | DOWN | - | Succinyl-CoA synthetase-like domain containing protein |
| Os08g0240500 | DOWN | - | Conserved hypothetical protein |

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|---|---|---|---|
| Os08g0254500 | DOWN | OsGELP92 | Similar to Esterase precursor (EC 3.1.1.-) (Early nodule-specific protein homolog) (Latex allergen Hev b 13) |
| Os08g0265000 | DOWN | - | Armadillo-like helical domain containing protein |
| Os08g0266400 | DOWN | - | Tetratricopeptide-like helical domain containing protein |
| Os08g0269700 | DOWN | - | Similar to golgi transport 1 protein B |
| Os08g0272000 | UP | - | Conserved hypothetical protein |
| Os08g0275200 | UP | OsPME20 | Pectin lyase fold/virulence factor domain containing protein |
| Os08g0277200 | UP | OsSTRL12 | Six-bladed beta-propeller, TolB-like domain containing protein |
| Os08g0278900 | UP | OsSPX6 | SPX, N-terminal domain containing protein |
| Os08g0293100 | DOWN | - | Similar to Beta-ketoacyl-ACP synthase |
| Os08g0296900 | DOWN | OsAlaAT3 | Similar to Alanine aminotransferase |
| Os08g0297800 | UP | - | Protein of unknown function DUF827, plant family protein |
| Os08g0298700 | UP | - | Non-protein coding transcript |
| Os08g0320400 | UP | - | Alpha/beta hydrolase fold-1 domain containing protein |
| Os08g0323600 | DOWN | OSK28 | SKP1 component domain containing protein |
| Os08g0330900 | UP | - | Similar to Peroxidase (EC 1.11.1.7) |
| Os08g0331000 | UP | - | Amine oxidase domain containing protein |
| Os08g0332700 | DOWN | - | MULE transposase, conserved domain domain containing protein |
| Os08g0334900 | UP | - | Similar to Receptor protein kinase |
| Os08g0339200 | UP | - | Similar to KI domain interacting kinase 1 |
| Os08g0351300 | DOWN | - | Conserved hypothetical protein |
| Os08g0359200 | DOWN | - | Nucleotide-binding, alpha-beta plait domain containing protein |
| Os08g0360300 | DOWN | - | HAD-superfamily hydrolase, subfamily IA, variant 3 domain containing protein |
| Os08g0371200 | UP | OsMYB86 | Hypothetical conserved gene |
| Os08g0375400 | UP | Os1-Cys | Similar to 1-Cys peroxiredoxin |
| Os08g0378000 | DOWN | OsGELP93 | Lipase, GDSL domain containing protein |
| Os08g0386200 | DOWN | - | Similar to plectin-related |
| Os08g0387050 | UP | - | Alpha/beta hydrolase fold-3 domain containing protein |
| Os08g0389700 | UP | - | Alpha/beta hydrolase fold-3 domain containing protein |
| Os08g0392500 | DOWN | - | Similar to Dirigent protein |
| Os08g0398350 | DOWN | - | Allergen V5/Tpx-1 related family protein |
| Os08g0400200 | DOWN | OsPP2C65 | Similar to predicted protein |
| Os08g0411000 | DOWN | - | Armadillo-like helical domain containing protein |
| Os08g0413850 | DOWN | OsSCP40 | Similar to Serine carboxypepsidase (Fragment) |
| Os08g0423600 | DOWN | - | Short-chain dehydrogenase/reductase SDR domain containing protein |
| Os08g0423850 | DOWN | OsObgC1 | Similar to GTP1/OBG family protein |
| Os08g0425500 | UP | - | Similar to predicted protein |
| Os08g0425700 | UP | OsHAK7 | Potassium transporter 4 (AtPOT4) (AtKUP3) (AtKT4) |
| Os08g0429200 | UP | OsCW-ZF7 | Zinc finger, CW-type domain containing protein |

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|---|---|---|---|
| Os08g0433300 | DOWN | OsUsp1 | Rossmann-like alpha/beta/alpha sandwich fold domain containing protein |
| Os08g0434100 | UP | OsUXS6 | Hypothetical conserved gene |
| Os08g0434632 | UP | prx109 | Similar to Peroxidase (EC 1.11.1.7) |
| Os08g0439600 | DOWN | POX3006 | Similar to Peroxidase precursor (EC 1.11.1.7) |
| Os08g0442400 | DOWN | PRX115 | Similar to Cationic peroxidase |
| Os08g0445700 | DOWN | WRKY47 | WRKY transcription factor, Drought toleranc |
| Os08g0450700 | DOWN | - | Protein of unknown function DUF3133 domain containing protein |
| Os08g0457400 | DOWN | - | Hypothetical protein |
| Os08g0461600 | DOWN | OsCML24 | Similar to Calcium-binding protein CAST |
| Os08g0465800 | DOWN | ONAC015 | Similar to NAM / CUC2-like protein |
| Os08g0474866 | UP | - | Conserved hypothetical protein |
| Os08g0475400 | UP | OsPOP17 | Similar to predicted protein |
| Os08g0480000 | UP | - | BRCT domain containing protein |
| Os08g0482600 | DOWN | - | Glycosyl-phosphatidyl inositol-anchored, plant domain containing protein |
| Os08g0484100 | DOWN | TBPOs-2 | Similar to 26S proteasome subunit 4-like protein (26S proteasome subunit AtRPT2a) |
| Os08g0487900 | DOWN | APX2 | Ascorbate peroxidase, ROS homeostasis, Chloroplast protection, Carbohydrate metabolism, Plant architecture, Fertility maintenanc |
| Os08g0490100 | DOWN | - | KIP1-like domain containing protein |
| Os08g0490900 | DOWN | - | Similar to ZIP transporter |
| Os08g0491000 | DOWN | - | Non-protein coding transcript |
| Os08g0499300 | DOWN | - | Similar to Cytochrome P450 |
| Os08g0502700 | DOWN | - | Protein of unknown function DUF266, plant family protein |
| Os08g0505200 | UP | - | Transferase family protein |
| Os08g0508000 | UP | - | Transferase domain containing protein |
| Os08g0508100 | DOWN | OsFKII | Similar to Fructokinase (Fragment) |
| Os08g0509200 | UP | - | Nucleotide-binding, alpha-beta plait domain containing protein |
| Os08g0510300 | DOWN | OsUCL25 | Similar to Chemocyanin precursor (Basic blue protein) (Plantacyanin) |
| Os08g0512700 | UP | OsUCL26 | Similar to blue copper protein |
| Os08g0515600 | DOWN | OsRLCK245 | Serine/threonine protein kinase-related domain containing protein |
| Os08g0515800 | DOWN | - | Conserved hypothetical protein |
| Os08g0517150 | UP | - | Protein of unknown function DUF599 family protein |
| Os08g0519700 | DOWN | - | Aldolase-type TIM barrel domain containing protein |
| Os08g0520550 | DOWN | Os-NRT1.1A | Similar to Nitrate/chlorate transporter |
| Os08g0521000 | UP | ROMT9 | Caffeic acid O-methyltransferase, Flavonoid 3'-O-methyltransferase, Melatonin biosynthesis, Tricin biosynthesi |
| Os08g0525700 | DOWN | - | FAD linked oxidase, N-terminal domain containing protein |
| Os08g0526100 | DOWN | CSLF6 | MLG (mixed-linkage glucan) synthase, Biosynthesis of MLG (cell wall polysaccharide |

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|---|---|---|---|
| Os08g0529100 | UP | OsACBP1 | Acyl-CoA-binding protein , Stress respons |
| Os08g0531000 | UP | OsPRO-PEP3 | Small peptides, Anti-herbivore defense response, Response to wounding and oral secretio |
| Os08g0541300 | DOWN | - | Similar to PolI-like DNA polymerase |
| Os08g0544400 | UP | ORK1 | Serine/threonine protein kinase-related domain containing protein |
| Os08g0546100 | UP | - | Conserved hypothetical protein |
| Os08g0547200 | UP | OsCCR29 | Similar to dihydroflavonol-4-reductase |
| Os08g0550500 | UP | - | Conserved hypothetical protein |
| Os08g0553500 | DOWN | - | Non-protein coding transcript |
| Os08g0553700 | DOWN | - | Hypothetical conserved gene |
| Os08g0556300 | DOWN | OsGPT1 | Similar to Glucose-6-phosphate/phosphate-translocator precursor |
| Os08g0556900 | UP | GLP8-6 | Germin-like protein 8-6, Disease resistanc |
| Os09g0116900 | DOWN | OsACO1 | Similar to Iron-responsive element binding protein (Fragment) |
| Os09g0130800 | DOWN | SSIIIA | Starch synthase, Starch biosynthesi |
| Os09g0132900 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os09g0135800 | DOWN | - | Conserved hypothetical protein |
| Os09g0248100 | UP | - | Hypothetical conserved gene |
| Os09g0262000 | UP | - | Similar to SHR5-receptor-like kinase (Fragment) |
| Os09g0264400 | UP | SHR5 | Protein kinase, core domain containing protein |
| Os09g0268800 | DOWN | - | DNA-binding, integrase-type domain containing protein |
| Os09g0272000 | UP | - | Conserved hypothetical protein |
| Os09g0272900 | DOWN | ARE1 | Determination of the grain yield, Modulation of nitrogen utilizatio |
| Os09g0273950 | DOWN | - | Hypothetical conserved gene |
| Os09g0275400 | UP | OsEXO70 FX4 | Exo70 exocyst complex subunit family protein |
| Os09g0276600 | DOWN | OsXTH17 | Xyloglucan endotransglycosylase/hydrolase protein 8 precursor (EC 2.4.1.207) (End-xyloglucan transferase |
| Os09g0279500 | DOWN | - | Conserved hypothetical protein |
| Os09g0290900 | DOWN | OsXTH4 | Glycoside hydrolase, family 16 domain containing protein |
| Os09g0298100 | UP | - | Similar to Preprotein translocase secY subunit, chloroplast precursor (CpSecY) |
| Os09g0305300 | UP | - | Conserved hypothetical protein |
| Os09g0316000 | UP | - | Hypothetical gene |
| Os09g0326900 | UP | - | Leucine-rich repeat, N-terminal domain containing protein |
| Os09g0327575 | DOWN | - | Conserved hypothetical protein |
| Os09g0328332 | UP | - | Similar to GAG1At protein |
| Os09g0328800 | UP | - | Protein kinase, core domain containing protein |
| Os09g0329200 | UP | OsCCR | Similar to Cinnamoyl-CoA reductase (EC 1.2.1.44) |
| Os09g0330000 | DOWN | - | MIR domain containing protein |
| Os09g0337500 | DOWN | - | Conserved hypothetical protein |
| Os09g0341500 | DOWN | - | Tetratricopeptide-like helical domain containing protein |
| Os09g0344800 | UP | - | Sulfotransferase family protein |

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|---|---|---|---|
| Os09g0351800 | DOWN | - | Similar to male sterility protein 2 |
| Os09g0354900 | UP | - | Similar to Indole-3-glycerol phosphate synthase-like |
| Os09g0356000 | DOWN | - | Hypothetical conserved gene |
| Os09g0356200 | DOWN | Os_F0451 | Conserved hypothetical protein |
| Os09g0369400 | DOWN | - | Conserved hypothetical protein |
| Os09g0382400 | DOWN | - | Conserved hypothetical protein |
| Os09g0386200 | DOWN | - | Xyloglucan fucosyltransferase family protein |
| Os09g0387000 | UP | - | Uncharacterized conserved protein UCP016210 domain containing protein |
| Os09g0394600 | UP | - | Hypothetical conserved gene |
| Os09g0396900 | UP | - | Conserved hypothetical protein |
| Os09g0400500 | DOWN | - | Protein of unknown function DUF247, plant family protein |
| Os09g0410125 | DOWN | OsbZIP65 | Conserved hypothetical protein |
| Os09g0410400 | DOWN | - | Non-protein coding transcript |
| Os09g0412700 | UP | - | Hypothetical gene |
| Os09g0413300 | DOWN | - | Calmodulin binding protein-like domain containing protein |
| Os09g0415700 | UP | - | Carotenoid oxygenase domain containing protein |
| Os09g0418000 | DOWN | - | Plant disease resistance response protein family protein |
| Os09g0421700 | UP | - | Conserved hypothetical protein |
| Os09g0422500 | UP | OsWRKY69 | WRKY transcription factor 69 |
| Os09g0425300 | UP | - | Conserved hypothetical protein |
| Os09g0425900 | DOWN | - | Conserved hypothetical protein |
| Os09g0426100 | UP | - | Hypothetical conserved gene |
| Os09g0431600 | DOWN | OsABCA5 | Similar to ABC transporter family, cholesterol/phospholipid flippase |
| Os09g0432300 | UP | OsSET30 | Similar to SET domain protein |
| Os09g0433800 | DOWN | - | Prephenate dehydratase domain containing protein |
| Os09g0447000 | DOWN | - | Protein of unknown function DUF1262 domain containing protein |
| Os09g0449800 | UP | - | Conserved hypothetical protein |
| Os09g0451000 | DOWN | Osal-phaCA4 | Similar to carbonic anhydrase |
| Os09g0451500 | UP | - | Non-protein coding transcript |
| Os09g0456700 | UP | - | Endonuclease/exonuclease/phosphatase domain containing protein |
| Os09g0459800 | UP | OsANN7 | Similar to Annexin-like protein |
| Os09g0461700 | UP | - | Non-protein coding transcript |
| Os09g0463300 | DOWN | - | Sialidase domain containing protein |
| Os09g0469300 | UP | OsRNS3 | Similar to S-like ribonuclease (RNase PD2) (Fragment) |
| Os09g0477900 | DOWN | OsCslA11 | Conserved hypothetical protein |
| Os09g0479900 | UP | - | Protein of unknown function DUF868, plant family protein |
| Os09g0482800 | UP | AP2/EREBP | - |

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|---|---|---|---|
| Os09g0484200 | UP | OsTPS8 | Class II trehalose-phosphate-synthase (TPS) gene family member, Salt stress tolerance, Control of yield-related trait |
| Os09g0486375 | DOWN | - | Chaperonin Cpn60/TCP-1 family protein |
| Os09g0486500 | DOWN | OsRLCK255 | Similar to Avr9/Cf-9 induced kinase 1 |
| Os09g0491100 | UP | - | Zinc finger, CCHC-type domain containing protein |
| Os09g0491740 | UP | OsGAD1 | Similar to Glutamate decarboxylase |
| Os09g0491772 | UP | Osal-phaCA6 | Similar to Nectarin III |
| Os09g0497000 | UP | OsREM5.2 | Remorin, C-terminal region domain containing protein |
| Os09g0501200 | UP | - | Similar to gibberellin receptor GID1L2 |
| Os09g0505300 | DOWN | - | Alpha/beta hydrolase fold-3 domain containing protein |
| Os09g0508900 | DOWN | - | Multi antimicrobial extrusion protein MatE family protein |
| Os09g0509200 | UP | OsUCL29 | Cupredoxin domain containing protein |
| Os09g0518200 | UP | - | Similar to predicted protein |
| Os09g0520550 | DOWN | - | Esterase/lipase/thioesterase domain containing protein |
| Os09g0520800 | UP | OsDof24 | Similar to PBF protein |
| Os09g0522200 | DOWN | - | Similar to Histone H2B.2 |
| Os09g0523200 | DOWN | - | Hypothetical conserved gene |
| Os09g0526300 | DOWN | - | Myb/SANT-like domain domain containing protein |
| Os09g0530500 | DOWN | OsWRKY30 | WRKY transcription factor 30 |
| Os09g0539000 | UP | - | Pyridoxal phosphate-dependent transferase, major region, subdomain 1 domain containing protein |
| Os09g0539800 | UP | - | tRNA-binding arm domain containing protein |
| Os09g0541500 | UP | CYP76M2 | Cytochrome P450 family protein |
| Os09g0547500 | DOWN | - | Conserved hypothetical protein |
| Os09g0555100 | UP | Os8bglu27 | Similar to Beta-primeverosidase (EC 3.2.1.149) |
| Os09g0555150 | UP | Os8bglu28 | Similar to Amygdalin hydrolase isoform AH I precursor (EC 3.2.1.117) |
| Os09g0555800 | UP | OsHAK26 | Potassium uptake protein, kup domain containing protein |
| Os09g0556000 | UP | HMGR | Similar to 3-hydroxy-3-methylglutaryl coenzyme A reductase (EC 1.1.1.34) (Fragment) |
| Os09g0556500 | DOWN | - | Non-protein coding transcript |
| Os09g0563250 | UP | - | Mitochodrial transcription termination factor-related family protein |
| Os09g0563800 | DOWN | - | Non-protein coding transcript |
| Os09g0564000 | UP | - | Protein of unknown function DUF630 domain containing protein |
| Os09g0564800 | DOWN | - | Similar to Auxin response factor 21 |
| Os09g0565700 | UP | - | Protein of unknown function DUF599 family protein |
| Os09g0566050 | UP | - | Conserved hypothetical protein |
| Os09g0568400 | UP | OsUGlcAE2 | NAD(P)-binding domain containing protein |

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|---|---|---|---|
| Os10g0105900 | UP | - | Similar to POT family protein |
| Os10g0111400 | UP | - | Similar to Proteasome subunit beta type 1 (EC 3.4.25.1) (20S proteasome alpha subunit F) (20S proteasome subunit beta-6) |
| Os10g0112850 | DOWN | NPP1 | Nucleotide pyrophosphatase/phosphodiesterase, Negative effect on plant growth and starch accumulatio |
| Os10g0113100 | UP | - | Leucine-rich repeat, N-terminal domain containing protein |
| Os10g0116000 | DOWN | OsA-BCG45 | ABC-2 type transporter domain containing protein |
| Os10g0124150 | DOWN | OsBAG2 | Similar to protein binding protein |
| Os10g0130500 | DOWN | - | RabGAP/TBC domain containing protein |
| Os10g0131100 | DOWN | - | Similar to Glutathione s-transferase (Fragment) |
| Os10g0132800 | DOWN | - | Protein of unknown function DUF241, plant family protein |
| Os10g0135650 | DOWN | - | Protein of unknown function DUF241, plant family protein |
| Os10g0135833 | DOWN | - | Glycolipid transfer protein domain domain containing protein |
| Os10g0137300 | DOWN | CP | Similar to Cysteine proteinase (EC 3.4.22.-) |
| Os10g0137700 | UP | - | Conserved hypothetical protein |
| Os10g0140700 | UP | - | Similar to predicted protein |
| Os10g0141200 | DOWN | OsGELP98 | Lipase, GDSL domain containing protein |
| Os10g0159300 | UP | - | Armadillo-like helical domain containing protein |
| Os10g0162100 | UP | OsFLA11 | FAS1 domain domain containing protein |
| Os10g0163300 | DOWN | - | Myb/SANT-like domain domain containing protein |
| Os10g0168900 | DOWN | OsCCR24 | Similar to Cinnamoyl CoA reductase |
| Os10g0180800 | DOWN | - | Cytochrome P450 family protein |
| Os10g0188275 | DOWN | - | Conserved hypothetical protein |
| Os10g0189100 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os10g0190500 | UP | - | Disease resistance protein domain containing protein |
| Os10g0198600 | DOWN | - | Conserved hypothetical protein |
| Os10g0198900 | UP | - | Cytochrome P450 family protein |
| Os10g0206000 | DOWN | - | Conserved hypothetical protein |
| Os10g0208500 | DOWN | - | Similar to Plastid-specific 30S ribosomal protein 2, chloroplast precursor (PSRP- 2) |
| Os10g0315400 | UP | - | Similar to H1005F08.16 protein |
| Os10g0320001 | UP | OsPFPA4 | Similar to predicted protein |
| Os10g0322300 | DOWN | - | Protein of unknown function DUF247, plant family protein |
| Os10g0340800 | DOWN | - | Targeting for Xklp2 family protein |
| Os10g0343951 | UP | - | Similar to cupin, RmlC-type |
| Os10g0344000 | UP | BIP107 | Similar to Eukaryotic translation initiation factor 5 (eIF-5) |
| Os10g0348900 | DOWN | - | Similar to Pi5-1 |
| Os10g0352000 | DOWN | - | Non-protein coding transcript |
| Os10g0361000 | UP | - | Hypothetical conserved gene |
| Os10g0362700 | UP | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |

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|---|---|---|---|
| Os10g0370500 | UP | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os10g0371100 | UP | - | Conserved hypothetical protein |
| Os10g0376900 | UP | - | F-box domain, cyclin-like domain containing protein |
| Os10g0389300 | UP | - | Ankyrin repeat containing protein |
| Os10g0393800 | UP | - | Protein of unknown function DUF81 family protein |
| Os10g0394100 | DOWN | OsRLCK265 | Malectin-like carbohydrate-binding domain domain containing protein |
| Os10g0395400 | DOWN | - | Conserved hypothetical protein |
| Os10g0396666 | DOWN | OsRLCK266 | Similar to OsD305 |
| Os10g0404900 | DOWN | - | Malectin-like carbohydrate-binding domain domain containing protein |
| Os10g0412050 | DOWN | OsTPP7 | Similar to predicted protein |
| Os10g0418900 | UP | - | Conserved hypothetical protein |
| Os10g0421800 | DOWN | OsPUB18 | Armadillo-like helical domain containing protein |
| Os10g0437600 | DOWN | - | Conserved hypothetical protein |
| Os10g0442100 | DOWN | - | Endonuclease/exonuclease/phosphatase domain containing protein |
| Os10g0442400 | DOWN | OsVIT2 | Protein of unknown function DUF125, transmembrane family protein |
| Os10g0442800 | UP | - | Serine/threonine protein kinase domain containing protein |
| Os10g0456000 | DOWN | - | Similar to membrane alanyl aminopeptidase |
| Os10g0460900 | DOWN | - | Zinc finger, RING-type domain containing protein |
| Os10g0462800 | DOWN | - | Conserved hypothetical protein |
| Os10g0465700 | DOWN | OsPPR1 | Pentatricopeptide repeat domain containing protein |
| Os10g0467900 | DOWN | - | Protein of unknown function DUF248, methyltransferase putative family protein |
| Os10g0479500 | DOWN | WRKY76 | WRKY transcription factor, Transcriptional repressor, Pathogen defens |
| Os10g0482000 | DOWN | OsCIPK16 | Similar to CBL-interacting protein kinase 16 |
| Os10g0482066 | DOWN | - | Zinc finger, U1-type domain containing protein |
| Os10g0486100 | DOWN | BC6 | Cellulose synthase A catalytic subunit 9, Cell wall biosynthesis and plant growt |
| Os10g0489500 | DOWN | - | Conserved hypothetical protein |
| Os10g0491450 | DOWN | OsSAP | Similar to senescence-associated protein DH |
| Os10g0493600 | DOWN | - | Similar to cDNA, clone: J075189B12, full insert sequence |
| Os10g0493850 | DOWN | OsCB-SPPR1 | Cystathionine beta-synthase, core domain containing protein |
| Os10g0496900 | DOWN | - | Hypothetical conserved gene |
| Os10g0497300 | DOWN | - | Zinc finger, C2H2-type domain containing protein |
| Os10g0498100 | UP | - | Similar to AAA-type ATPase family protein |
| Os10g0498300 | DOWN | - | Similar to Senescence-associated protein SAG102 |
| Os10g0503100 | DOWN | Oshox11 | Homeodomain-related domain containing protein |
| Os10g0506100 | UP | - | Conserved hypothetical protein |
| Os10g0506800 | DOWN | ACO1 | ACC oxidase, Ethylene biosynthesi |

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|---|---|---|---|
| Os10g0509000 | DOWN | PDIL2 | Similar to protein disulfide isomerase |
| Os10g0511800 | DOWN | - | Conserved hypothetical protein |
| Os10g0512400 | UP | - | Similar to ARP protein |
| Os10g0512500 | DOWN | - | Alpha/beta hydrolase fold-3 domain containing protein |
| Os10g0520400 | UP | - | Domain of unknown function DUF547 domain containing protein |
| Os10g0521000 | UP | OsUCL31 | Cupredoxin domain containing protein |
| Os10g0521500 | UP | - | Non-protein coding transcript |
| Os10g0521900 | DOWN | - | Hypothetical protein |
| Os10g0522700 | UP | - | NusB/RsmB/TIM44 domain containing protein |
| Os10g0524300 | UP | OsSub58 | Similar to Subtilisin-like protease |
| Os10g0524700 | UP | - | EF hand domain containing protein |
| Os10g0525800 | DOWN | - | Hypothetical protein |
| Os10g0528200 | UP | - | Conserved hypothetical protein |
| Os10g0528300 | UP | SAP1 | A20/AN1 zinc-finger protein, Response to multiple biotic stresses, Regulation of abiotic stress response |
| Os10g0528400 | UP | Os9bglu30 | Similar to Beta-primeverosidase (EC 3.2.1.149) |
| Os10g0532100 | DOWN | OsPILS1 | Auxin efflux carrier domain containing protein |
| Os10g0532300 | UP | OsHsp58.7 | Similar to Heat shock protein 70 (Hsc70-5) |
| Os10g0534801 | UP | - | Adenine nucleotide translocator 1 domain containing protein |
| Os10g0536000 | UP | rpL32_9.1 | Similar to Ribosomal L32 |
| Os10g0538200 | DOWN | - | Similar to Br FatA1 |
| Os10g0544600 | UP | - | Similar to cDNA clone:001-044-E12, full insert sequence |
| Os10g0546600 | DOWN | - | Similar to Pyruvate dehydrogenase E1 beta subunit isoform 3 (EC 1.2.4.1) |
| Os10g0548000 | DOWN | - | NB-ARC domain containing protein |
| Os10g0548700 | DOWN | OsSGT | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os10g0549500 | DOWN | - | Similar to predicted protein |
| Os10g0550100 | DOWN | - | Glycoside hydrolase, family 29 (alpha-L-fucosidase) protein |
| Os10g0553800 | UP | OsDREB1A | DRE-binding protein 1A |
| Os10g0556100 | DOWN | - | Hypothetical conserved gene |
| Os10g0558200 | UP | Roc6(t) | Similar to Homeobox protein GLABRA2 (Homeobox-leucine zipper protein ATHB-10) (HD-ZIP protein ATHB-10) |
| Os10g0559700 | DOWN | - | Hypothetical conserved gene |
| Os10g0560700 | UP | - | Hypothetical conserved gene |
| Os10g0561300 | DOWN | - | Similar to Acyl carrier protein III, chloroplast precursor (ACP III) |
| Os10g0569500 | UP | - | Sedlin domain containing protein |
| Os10g0569600 | UP | LOGL9 | Lysine decarboxylase-like protein, Response to abiotic stresse |
| Os10g0571300 | UP | - | Hypothetical conserved gene |
| Os10g0572500 | DOWN | - | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os10g0573800 | UP | OsPILS7b | Similar to auxin Efflux Carrier family protein |

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|---|---|---|---|
| Os10g0574750 | DOWN | - | Sulfotransferase family protein |
| Os10g0578950 | DOWN | - | Similar to AMP-binding protein (Adenosine monophosphate binding protein 6 AMPBP6) |
| Os11g0102200 | DOWN | - | Signal peptidase 22 kDa subunit family protein |
| Os11g0103000 | DOWN | - | Cysteinyl-tRNA synthetase, class Ia family protein |
| Os11g0104400 | UP | - | Zinc finger, DHHC-type, palmitoyltransferase domain containing protein |
| Os11g0104800 | UP | - | ATPase, AAA-type, core domain containing protein |
| Os11g0105750 | DOWN | - | Peptidase C1A, papain family protein |
| Os11g0106200 | DOWN | - | Conserved hypothetical protein |
| Os11g0113700 | UP | EIP3 | Prephenate dehydratase domain containing protein |
| Os11g0116300 | UP | - | Similar to Prephenate dehydratase |
| Os11g0118500 | DOWN | Ub-CEP52-2 | Similar to 60S ribosomal protein L40 (CEP52) |
| Os11g0124500 | UP | OsERF | - |
| Os11g0128300 | UP | - | Hypothetical conserved gene |
| Os11g0131700 | UP | OsWAK95 | Similar to Protein kinase domain containing protein, expressed |
| Os11g0138400 | UP | - | Non-protein coding transcript |
| Os11g0140700 | DOWN | - | Aldo/keto reductase family protein |
| Os11g0144900 | DOWN | - | Pentatricopeptide repeat domain containing protein |
| Os11g0146300 | UP | - | Non-protein coding transcript |
| Os11g0147150 | UP | - | Hypothetical protein |
| Os11g0153000 | UP | - | Similar to NB-ARC domain containing protein |
| Os11g0153600 | DOWN | - | Hypothetical protein |
| Os11g0153700 | DOWN | - | Hypothetical conserved gene |
| Os11g0153800 | UP | - | Conserved hypothetical protein |
| Os11g0154500 | DOWN | - | Similar to BLN1-1 |
| Os11g0155500 | UP | - | Cyclin-like F-box domain containing protein |
| Os11g0156300 | DOWN | - | Hypothetical conserved gene |
| Os11g0157000 | UP | OsRLCK290 | Similar to Protein kinase domain containing protein |
| Os11g0160400 | UP | - | Conserved hypothetical protein |
| Os11g0161700 | UP | - | Hypothetical conserved gene |
| Os11g0162200 | UP | - | Hypothetical protein |
| Os11g0167500 | DOWN | - | Conserved hypothetical protein |
| Os11g0179000 | UP | OsUGT98B3 | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os11g0180900 | UP | WAK112 | Wall-associated kinase, Negative regulation of rice blast resistanc |
| Os11g0195600 | UP | - | Hypothetical protein |
| Os11g0199200 | UP | OspPGM | Plastidic phosphoglucomutase, Starch synthesis in rice polle |
| Os11g0201299 | DOWN | - | Protein of unknown function DUF594 family protein |
| Os11g0202600 | UP | - | Intron-encoded nuclease 2 domain containing protein |

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|---|---|---|---|
| Os11g0204600 | DOWN | OsEnS-134 | Drug/metabolite transporter domain containing protein |
| Os11g0204800 | DOWN | - | Non-protein coding transcript |
| Os11g0206850 | DOWN | - | Hypothetical protein |
| Os11g0210300 | UP | SIP28 | Similar to SKIP interacting protein 28 (Fragment) |
| Os11g0210500 | UP | - | Hypothetical gene |
| Os11g0211700 | UP | - | Conserved hypothetical protein |
| Os11g0212900 | UP | - | Conserved hypothetical protein |
| Os11g0214400 | UP | - | Hypothetical conserved gene |
| Os11g0215100 | UP | - | Similar to transparent testa 12 protein |
| Os11g0216100 | DOWN | - | Hypothetical protein |
| Os11g0220300 | DOWN | - | Conserved hypothetical protein |
| Os11g0227600 | DOWN | - | Lipoxygenase, LH2 domain containing protein |
| Os11g0227800 | DOWN | - | Conserved hypothetical protein |
| Os11g0228201 | UP | - | Conserved hypothetical protein |
| Os11g0229100 | DOWN | - | Glycoside hydrolase, catalytic core domain containing protein |
| Os11g0229300 | DOWN | OsERF | - |
| Os11g0229333 | DOWN | OsbHLH045 | Helix-loop-helix DNA-binding domain containing protein |
| Os11g0229400 | DOWN | OsRCCR2 | Similar to Red chlorophyll catabolite reductase (Fragment) |
| Os11g0236932 | UP | OsGELP105 | Lipase, GDSL domain containing protein |
| Os11g0242200 | DOWN | - | Metallophosphoesterase domain containing protein |
| Os11g0245200 | DOWN | OsGSTU34 | Thioredoxin fold domain containing protein |
| Os11g0270201 | UP | OsFbox552 | Hypothetical conserved gene |
| Os11g0274700 | DOWN | Oshox23 | Similar to HAHB-5 (Fragment) |
| Os11g0286800 | DOWN | - | Similar to aminophospholipid ATPase |
| Os11g0292050 | DOWN | - | Hypothetical conserved gene |
| Os11g0303600 | UP | SIP2 | Similar to SIPL |
| Os11g0305300 | DOWN | - | Pentatricopeptide repeat domain containing protein |
| Os11g0308800 | DOWN | OsSSIIc | Similar to Starch synthase II, chloroplast precursor (EC 2.4.1.21) (SS II) (GBSSII) (Granule-bound starch synthase II) |
| Os11g0425300 | DOWN | - | Similar to Phosphoglycerate kinase |
| Os11g0438700 | DOWN | - | Similar to UDP-glucoronosyl and UDP-glucosyl transferase family protein, expressed |
| Os11g0439600 | UP | OsRLCK301 | Protein serine/threonine kinase (Protein kinase) |
| Os11g0441500 | UP | GRP | Similar to Glycine-rich cell wall structural protein 2 precursor |
| Os11g0455500 | UP | - | Hypothetical protein |
| Os11g0463700 | DOWN | - | Similar to cDNA clone:J013158D14, full insert sequence |

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|---|---|---|---|
| Os11g0475500 | UP | WSL3 | Component of the plastid-encoded plastid RNA polymerase (PEP), peripheral subunit of PEP complex, OsPAP1/OspTAC3, Early chloroplast developmen |
| Os11g0481150 | DOWN | OsSTA246 | Similar to Beta-amylase PCT-BMYI (EC 3.2.1.2) |
| Os11g0482400 | DOWN | - | Protein kinase, catalytic domain domain containing protein |
| Os11g0484500 | UP | LOGL10 | Similar to carboxy-lyase |
| Os11g0484700 | UP | - | Conserved hypothetical protein |
| Os11g0488400 | UP | - | Hypothetical genes |
| Os11g0488900 | UP | - | Cytochrome P450-like protein (CYP86B1) |
| Os11g0489250 | UP | - | Similar to terpene synthase 2 |
| Os11g0490300 | UP | - | Conserved hypothetical protein |
| Os11g0490600 | DOWN | alphaGa1 | Alpha-galactosidase precursor (EC 3.2.1.22) (Melibiase) (Alpha-D- galactoside galactohydrolase) |
| Os11g0498600 | UP | - | Hypothetical protein |
| Os11g0503900 | UP | FGL | Similar to Protochlorophyllide reductase B, chloroplastic |
| Os11g0514500 | UP | PPR794 | Pentatricopeptide repeat domain containing protein |
| Os11g0515700 | DOWN | - | Alpha/beta hydrolase fold-1 domain containing protein |
| Os11g0520500 | DOWN | - | Similar to Epoxide hydrolase |
| Os11g0531800 | DOWN | OsPLIM2c | Similar to Transcription factor L2 |
| Os11g0533100 | DOWN | - | Similar to 10-deacetylbaccatin III 10-O-acetyltransferase |
| Os11g0539700 | DOWN | - | Heavy metal transport/detoxification protein domain containing protein |
| Os11g0540100 | DOWN | OsSET39 | SET domain containing protein |
| Os11g0544000 | DOWN | - | Similar to MutS domain V family protein, expressed |
| Os11g0544800 | DOWN | - | Similar to Plus-3 domain containing protein, expressed |
| Os11g0549650 | UP | CYP84A5 | Coniferaldehyde 5-hydroxylase, Lignin biosynthesi |
| Os11g0549665 | UP | - | RNA-binding, CRM domain domain containing protein |
| Os11g0549667 | UP | Os_F0771 | Protein of unknown function DUF295 family protein |
| Os11g0550800 | DOWN | OsTRE | Similar to TRE1 protein (Fragment) |
| Os11g0552500 | UP | - | Esterase/lipase/thioesterase domain containing protein |
| Os11g0555300 | DOWN | OsRhmbd 17 | Similar to Membrane protein |
| Os11g0556400 | DOWN | - | Conserved hypothetical protein |
| Os11g0558900 | DOWN | OsEMSA1 | LysM domain-containing protein, Embryo sac developmen |
| Os11g0562600 | DOWN | - | Cytochrome P450 family protein |
| Os11g0565920 | DOWN | OsGSTU3 1 | Similar to Glutathione S-transferase GSTU31 (Fragment) |
| Os11g0568300 | DOWN | OsGSTU1 2 | Similar to Tau class GST protein 3 |
| Os11g0569500 | DOWN | GST | Similar to Glutathione S-transferase TSI-1 (EC 2.5.1.18) (Glutathione S- trans-ferase 1) |
| Os11g0569800 | UP | OsGSTU4 | Tau class GST protein 4 |
| Os11g0570000 | UP | OsGSTU3 | Glutathione S-transferase, C-terminal-like domain containing protein |

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|---|---|---|---|
| Os11g0572200 | DOWN | OsHDMA 704 | Similar to Amine oxidase, flavin-containing |
| Os11g0574333 | UP | - | Heavy metal transport/detoxification protein domain containing protein |
| Os11g0576900 | UP | - | Hypothetical gene |
| Os11g0578700 | DOWN | OsSce1 | Similar to SUMO E2 conjugating enzyme SCE1 |
| Os11g0582000 | UP | - | Peptidase aspartic, catalytic domain containing protein |
| Os11g0586001 | DOWN | CDPK | Similar to Calcium-dependent protein kinase 3 |
| Os11g0586300 | DOWN | - | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os11g0588300 | UP | CYP97C2 | Similar to Chloroplast carotenoid epsilon-ring hydroxylase |
| Os11g0591800 | UP | - | Hypothetical conserved gene |
| Os11g0592000 | UP | RLCK306 | Receptor-like cytoplasmic kinase, Various stress responses, Regulation of resistance to bacterial leaf streak (BLS |
| Os11g0592200 | UP | - | Similar to Branched-chain-amino-acid aminotransferase |
| Os11g0593700 | UP | Os-MED12_2 | Conserved hypothetical protein |
| Os11g0596250 | UP | - | Flavin-containing monooxygenase FMO family protein |
| Os11g0597700 | UP | - | Protein of unknown function DUF566 family protein |
| Os11g0598000 | DOWN | OsGGT | Similar to DNA chromosome 4, ESSA I CONTIG fragment NO. 6 (Glucosyl-transferase like protein) |
| Os11g0598800 | DOWN | OsEXPB4 | Similar to beta-expansin EXPB4 |
| Os11g0602500 | UP | - | 2OG-Fe(II) oxygenase domain containing protein |
| Os11g0602600 | UP | - | Similar to Agenet domain containing protein, expressed |
| Os11g0605100 | DOWN | OsERF | - |
| Os11g0606400 | DOWN | - | Similar to Monosaccharid transporter |
| Os11g0615900 | DOWN | OsRALF-29 | Conserved hypothetical protein |
| Os11g0625801 | DOWN | - | Similar to RIR1b protein precursor |
| Os11g0626700 | DOWN | OsRLCK308 | Similar to Protein kinase-like protein |
| Os11g0634200 | UP | - | Zinc finger, RING/FYVE/PHD-type domain containing protein |
| Os11g0635300 | UP | - | Mitochondrial carnitine/acylcarnitine carrier-like protein (A BOUT DE SOUFFLE) (Carnitine/acylcarnitine translocase-like protein) (CAC-like protein) |
| Os11g0635500 | UP | - | Hypothetical gene |
| Os11g0638000 | DOWN | OsACS2 | Similar to 4-coumarate--CoA ligase-like 2 |
| Os11g0639300 | UP | - | Similar to NPH1-1 |
| Os11g0655000 | DOWN | - | Pentatricopeptide repeat domain containing protein |
| Os11g0659700 | UP | OsFAD3 | Similar to W-3 fatty acid desaturase |
| Os11g0661101 | UP | OsTBL10 | Hypothetical conserved gene |
| Os11g0664400 | DOWN | - | Quinonprotein alcohol dehydrogenase-like domain containing protein |
| Os11g0664500 | UP | - | Similar to cDNA clone:J013071M22, full insert sequence |
| Os11g0664800 | DOWN | - | BTB domain containing protein |

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|---|---|---|---|
| Os11g0667700 | DOWN | CIPK15 | Serine/threonine protein kinase, Abiotic stresse |
| Os11g0668300 | DOWN | CHI | Chalcone isomerase domain containing protein |
| Os11g0668650 | DOWN | - | Hypothetical protein |
| Os11g0669100 | DOWN | - | Similar to protein binding / signal transducer |
| Os11g0670700 | DOWN | - | Protein of unknown function DUF607 family protein |
| Os11g0670800 | DOWN | - | Similar to GDA1/CD39 family protein, expressed |
| Os11g0670900 | UP | - | Similar to ZF-HD homeobox protein (Fragment) |
| Os11g0672400 | DOWN | - | Zinc finger, Tim10/DDP-type domain containing protein |
| Os11g0672600 | DOWN | - | Similar to Phosphoglycerate mutase family protein, expressed |
| Os11g0672700 | DOWN | - | Similar to Saccharopine dehydrogenase family protein, expressed |
| Os11g0678200 | DOWN | - | Conserved hypothetical protein |
| Os11g0681400 | DOWN | OsUGT75 E1 | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os11g0683500 | DOWN | - | Conserved hypothetical protein |
| Os11g0683600 | DOWN | - | Hypothetical gene |
| Os11g0686100 | UP | Os-CYP94C2 | Cytochrome P450 family protein |
| Os11g0689800 | UP | - | Conserved hypothetical protein |
| Os11g0691400 | DOWN | - | Protein of unknown function DUF3049 domain containing protein |
| Os11g0691500 | DOWN | YGL138(t) | Signal recognition particle 54 kDa (SRP54) protein, Chloroplast developmen |
| Os11g0691650 | UP | - | Similar to Signal recognition particle 54 kDa protein, chloroplast precursor (SRP54) (54 chloroplast protein) (54CP) (FFC) |
| Os11g0693800 | UP | RPS25 | Similar to Ribosomal protein S25 (40S ribosomal 25S subunit) |
| Os11g0695800 | DOWN | NAC17 | Blast disease-responsive transcription factor, Disease resistanc |
| Os11g0702100 | UP | OsCAT8 | Similar to Amino acid permease family protein, expressed |
| Os11g0704500 | UP | OsOFP18 | Protein of unknown function DUF623, plant domain containing protein |
| Os11g0706100 | DOWN | - | Putative 5-3 exonuclease domain containing protein |
| Os12g0101800 | DOWN | - | Conserved hypothetical protein |
| Os12g0104400 | UP | - | Conserved hypothetical protein |
| Os12g0113001 | UP | - | Similar to Ubiquinol-cytochrome c reductase complex 7.8 kDa protein (EC 1.10.2.2) (Mitochondrial hinge protein) (CR7) |
| Os12g0114000 | DOWN | OsSTA250 | Similar to Serine esterase family protein, expressed |
| Os12g0115801 | UP | - | Plant disease resistance response protein family protein |
| Os12g0117600 | DOWN | - | Myb transcription factor domain containing protein |
| Os12g0117700 | DOWN | OsAAP11 C | Similar to Amino acid carrier (Fragment) |
| Os12g0124500 | UP | ESP2 | Protein disulfide isomerase-like enzyme, Starch synthesis, Maturation of proglutelin in endosper |
| Os12g0125500 | UP | Os_F0390 | Similar to F-box domain containing protein |
| Os12g0128600 | UP | - | Similar to OSIGBa0126J24.2 protein |
| Os12g0130100 | DOWN | - | Similar to Glucose-1-phosphate adenylyltransferase |

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|---|---|---|---|
| Os12g0130200 | DOWN | - | Similar to Wali7 protein (Fragment) |
| Os12g0136900 | DOWN | - | Conserved hypothetical protein |
| Os12g0138050 | DOWN | ADH1 | Alcohol dehydrogenase 1 |
| Os12g0141000 | DOWN | Adh2* | Similar to Alcohol dehydrogenase |
| Os12g0147800 | UP | - | Hypothetical conserved gene |
| Os12g0148700 | DOWN | OsWD40-187 | Serine/threonine protein kinase-related domain containing protein |
| Os12g0153200 | UP | OsWD40-188 | Similar to Protein kinase domain containing protein, expressed |
| Os12g0156100 | DOWN | - | Plant disease resistance response protein family protein |
| Os12g0156866 | UP | - | Plant disease resistance response protein family protein |
| Os12g0159600 | UP | - | Similar to Heat shock protein binding protein |
| Os12g0163500 | UP | - | Similar to NB-ARC domain containing protein, expressed |
| Os12g0168100 | UP | - | Hypothetical protein |
| Os12g0169600 | DOWN | - | NB-ARC domain containing protein |
| Os12g0170800 | DOWN | - | Hypothetical gene |
| Os12g0171500 | DOWN | - | Similar to B0616E02-H0507E05.11 protein |
| Os12g0171801 | DOWN | - | Similar to NBS-LRR-like protein |
| Os12g0171900 | DOWN | - | Hypothetical gene |
| Os12g0175400 | UP | - | Similar to NBS-LRR protein (Fragment) |
| Os12g0178700 | DOWN | - | Hypothetical conserved gene |
| Os12g0183300 | UP | OsPP2C74 | Protein phosphatase 2C-like domain containing protein |
| Os12g0188566 | DOWN | - | Similar to leucine-rich repeat family protein / protein kinase family protein |
| Os12g0189300 | UP | - | Conserved hypothetical protein |
| Os12g0209000 | DOWN | OsRLCK322 | Hypothetical conserved gene |
| Os12g0209200 | UP | - | Homeodomain-like containing protein |
| Os12g0211600 | UP | OsOSC10 | Squalene cyclase domain containing protein |
| Os12g0215950 | DOWN | - | Similar to PHD-finger family protein, expressed |
| Os12g0216500 | UP | OMT | Similar to Herbicide safener binding protein |
| Os12g0218100 | UP | - | Hypothetical gene |
| Os12g0218500 | UP | - | Hypothetical conserved gene |
| Os12g0219700 | UP | - | Similar to predicted protein |
| Os12g0221600 | UP | - | Similar to alkaline alpha galactosidase 3 |
| Os12g0228800 | DOWN | - | Similar to Tropinone reductase-I (EC 1.1.1.206) (TR-I) (Tropine dehydrogenase) |
| Os12g0229100 | UP | - | Similar to Nod factor binding lectin-nucleotide phosphohydrolase |
| Os12g0230133 | UP | - | UDP-glucuronosyl/UDP-glucosyltransferase family protein |
| Os12g0233300 | DOWN | - | Similar to Adenosylhomocysteinase |
| Os12g0239900 | UP | - | Penicillin-binding protein, transpeptidase fold domain containing protein |
| Os12g0240900 | UP | - | Conserved hypothetical protein |

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|---|---|---|---|
| Os12g0242100 | UP | - | NB-ARC domain containing protein |
| Os12g0247700 | UP | - | Pentatricopeptide repeat domain containing protein |
| Os12g0254825 | UP | Os6PGDH2 | Similar to 6-phosphogluconate dehydrogenase |
| Os12g0257600 | UP | OsLTPd12 | Bifunctional inhibitor/plant lipid transfer protein/seed storage domain containing protein |
| Os12g0260500 | UP | - | Conserved hypothetical protein |
| Os12g0263000 | UP | OsFbox600 | Similar to MYND finger family protein, expressed |
| Os12g0263050 | UP | - | Similar to Cytochrome P450 family protein, expressed |
| Os12g0263600 | DOWN | - | Hypothetical conserved gene |
| Os12g0267800 | DOWN | LA1 | Regulation of shoot gravitropism and tiller angle, Regulation of polar auxin transpor |
| Os12g0267900 | DOWN | - | Similar to HVA22 protein |
| Os12g0281966 | DOWN | - | Sulfotransferase family protein |
| Os12g0289600 | DOWN | - | Sorghum bicolor leucine-rich repeat-containing extracellular glycoprotein precursor |
| Os12g0289800 | DOWN | - | Non-protein coding transcript |
| Os12g0291000 | DOWN | - | Conserved hypothetical protein |
| Os12g0292900 | DOWN | - | Hypothetical protein |
| Os12g0417300 | DOWN | - | Similar to CarD-like transcriptional regulator family protein, expressed |
| Os12g0420300 | UP | OsFbox608 | F-box domain, cyclin-like domain containing protein |
| Os12g0428000 | UP | - | Similar to Xaa-Pro aminopeptidase 2 (EC 3.4.11.9) |
| Os12g0428200 | UP | - | Hypothetical conserved gene |
| Os12g0433200 | DOWN | GATB | Glutamyl-tRNA(Gln) amidotransferase subunit B, Primary root developmen |
| Os12g0433700 | UP | - | Mitochondrial matrix Mmp37 domain containing protein |
| Os12g0439201 | UP | - | Hypothetical conserved gene |
| Os12g0441300 | DOWN | - | Non-protein coding transcript |
| Os12g0441700 | UP | - | Similar to plastid-specific ribosomal protein 6 |
| Os12g0442800 | UP | - | Conserved hypothetical protein |
| Os12g0458100 | UP | - | Similar to Rp1-like protein |
| Os12g0459300 | DOWN | OsRLCK334 | Serine/threonine protein kinase-related domain containing protein |
| Os12g0467300 | DOWN | - | Leucine-rich repeat, N-terminal domain containing protein |
| Os12g0468300 | DOWN | - | Similar to Leucine Rich Repeat family protein |
| Os12g0470000 | DOWN | - | Conserved hypothetical protein |
| Os12g0477400 | UP | - | Leucine-rich repeat domain containing protein |
| Os12g0480100 | DOWN | - | Cell division cycle-associated protein domain containing protein |
| Os12g0491800 | UP | - | Similar to Receptor kinase-like protein |
| Os12g0507500 | DOWN | - | Protein kinase, catalytic domain domain containing protein |

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|---|---|---|---|
| Os12g0517800 | DOWN | - | Similar to Receptor kinase-like protein |
| Os12g0520200 | UP | OsEXO70 FX8 | Exo70 exocyst complex subunit family protein |
| Os12g0538600 | UP | - | Non-protein coding transcript |
| Os12g0538700 | UP | - | Similar to HAT family dimerisation domain containing protein, expressed |
| Os12g0539700 | DOWN | - | Similar to F-box domain containing protein, expressed |
| Os12g0539751 | DOWN | - | Hypothetical conserved gene |
| Os12g0541500 | DOWN | - | Putative protein phosphatase 2C 76 |
| Os12g0547600 | DOWN | - | Conserved hypothetical protein |
| Os12g0548401 | UP | OsGSTT1 | Similar to Glutathione transferase AtGST 10 (EC 2.5.1.18) |
| Os12g0548501 | UP | OsPR4d | Barwin domain containing protein |
| Os12g0548700 | UP | OsPR4c | Similar to Barwin |
| Os12g0549700 | DOWN | OsPR4 | Similar to Chitin-binding allergen Bra r 2 (Fragments) |
| Os12g0559100 | DOWN | OsFbox620 | Cyclin-like F-box domain containing protein |
| Os12g0561000 | UP | - | Conserved hypothetical protein |
| Os12g0564400 | DOWN | - | Similar to Resistant protein |
| Os12g0567800 | UP | OsFbox624 | Similar to F-box domain containing protein, expressed |
| Os12g0569300 | UP | - | NB-ARC domain containing protein |
| Os12g0569500 | UP | - | Tetratricopeptide-like helical domain containing protein |
| Os12g0570700 | UP | - | Similar to 40S ribosomal protein S9 |
| Os12g0576300 | DOWN | - | Similar to 40S ribosomal protein S9 |
| Os12g0581900 | UP | - | Similar to NB-ARC domain containing protein |
| Os12g0583300 | DOWN | - | NB-ARC domain containing protein |
| Os12g0586300 | UP | - | Similar to NB-ARC domain containing protein, expressed |
| Os12g0598000 | UP | - | Conserved hypothetical protein |
| Os12g0599625 | DOWN | - | Non-protein coding transcript |
| Os12g0600400 | UP | - | Hypothetical conserved gene |
| Os12g0608633 | DOWN | - | Conserved hypothetical protein |
| Os12g0611100 | DOWN | - | Similar to Cytochrome P450 family protein |
| Os12g0611900 | UP | - | Cytochrome P450 family protein |
| Os12g0623900 | UP | - | Similar to GTP-binding protein engA |
| Os12g0628100 | UP | - | Protein of unknown function DUF594 family protein |
| Os12g0628600 | UP | OsLAC23 | Cupredoxin domain containing protein |
| Os12g0629700 | UP | Os-TBT2 | Transferase family protein |
| Os12g0630100 | UP | - | Conserved hypothetical protein |
| Os12g0632401 | UP | - | Similar to Pectinesterase family protein |
| Os12g0634500 | UP | - | Conserved hypothetical protein |
| Os12g0634600 | UP | - | Hypothetical conserved gene |
| Os12g0635700 | UP | - | Hypothetical conserved gene |

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|---|---|---|---|
| Os12g0637400 | UP | - | Hypothetical conserved gene |
| Os12g0638300 | UP | OsRLCK348 | Similar to Protein kinase domain containing protein, expressed |