

Annotation Cluster 1

Category

UP_SEQ_FEATURE
UP_SEQ_FEATURE
UP_SEQ_FEATURE
UP_SEQ_FEATURE
UP_SEQ_FEATURE
UP_SEQ_FEATURE
UP_SEQ_FEATURE
UP_SEQ_FEATURE
SP_PIR_KEYWORDS
UP_SEQ_FEATURE
INTERPRO
INTERPRO
PIR_SUPERFAMILY
INTERPRO
INTERPRO
GOTERM_MF_FAT
UP_SEQ_FEATURE
SP_PIR_KEYWORDS
GOTERM_CC_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT
INTERPRO

Annotation Cluster 2

Category

GOTERM_BP_FAT
GOTERM_BP_FAT
SP_PIR_KEYWORDS
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
INTERPRO
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_CC_FAT

Annotation Cluster 3

Category

SP_PIR_KEYWORDS
GOTERM_CC_FAT
SP_PIR_KEYWORDS
GOTERM_MF_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT

GOTERM_BP_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT

Annotation Cluster 4

Category
GOTERM_CC_FAT
GOTERM_BP_FAT
GOTERM_MF_FAT

Annotation Cluster 5

Category
KEGG_PATHWAY
SP_PIR_KEYWORDS
GOTERM_CC_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
INTERPRO
GOTERM_BP_FAT
SP_PIR_KEYWORDS
GOTERM_BP_FAT
GOTERM_MF_FAT
GOTERM_MF_FAT
GOTERM_BP_FAT
SP_PIR_KEYWORDS
GOTERM_BP_FAT
GOTERM_CC_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
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GOTERM_BP_FAT
INTERPRO
GOTERM_BP_FAT
GOTERM_BP_FAT
INTERPRO
GOTERM_BP_FAT
GOTERM_BP_FAT
SP_PIR_KEYWORDS
INTERPRO
GOTERM_BP_FAT
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GOTERM_BP_FAT

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GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT

Annotation Cluster 6

Category
INTERPRO
INTERPRO
UP_SEQ_FEATURE
PIR_SUPERFAMILY
UP_SEQ_FEATURE
SP_PIR_KEYWORDS
UP_SEQ_FEATURE
UP_SEQ_FEATURE
INTERPRO
INTERPRO
INTERPRO
INTERPRO

Annotation Cluster 7

Category
BIOCARTA
KEGG_PATHWAY
SMART
SP_PIR_KEYWORDS
INTERPRO
INTERPRO
GOTERM_CC_FAT
SP_PIR_KEYWORDS
GOTERM_BP_FAT
GOTERM_BP_FAT
SP_PIR_KEYWORDS
GOTERM_BP_FAT
GOTERM_CC_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
SP_PIR_KEYWORDS
GOTERM_BP_FAT

Annotation Cluster 8

Category
INTERPRO

SMART
UP_SEQ_FEATURE
INTERPRO
INTERPRO
PIR_SUPERFAMILY
SP_PIR_KEYWORDS

Annotation Cluster 9

Category
INTERPRO
GOTERM_MF_FAT
SMART
GOTERM_MF_FAT
INTERPRO
SP_PIR_KEYWORDS
GOTERM_MF_FAT
SP_PIR_KEYWORDS
INTERPRO
UP_SEQ_FEATURE
UP_SEQ_FEATURE
GOTERM_MF_FAT
SMART
PIR_SUPERFAMILY
INTERPRO
UP_SEQ_FEATURE
UP_SEQ_FEATURE

Annotation Cluster 10

Category
SMART
SP_PIR_KEYWORDS
UP_SEQ_FEATURE
INTERPRO
INTERPRO
GOTERM_MF_FAT
INTERPRO
GOTERM_MF_FAT
UP_SEQ_FEATURE
GOTERM_MF_FAT
GOTERM_MF_FAT
GOTERM_MF_FAT
GOTERM_MF_FAT
SP_PIR_KEYWORDS
GOTERM_MF_FAT

Annotation Cluster 11

Category
SP_PIR_KEYWORDS
SP_PIR_KEYWORDS

GOTERM_CC_FAT

Annotation Cluster 12

Category

SP_PIR_KEYWORDS

UP_SEQ_FEATURE

INTERPRO

Annotation Cluster 13

Category

GOTERM_CC_FAT

GOTERM_CC_FAT

GOTERM_CC_FAT

GOTERM_CC_FAT

GOTERM_CC_FAT

Annotation Cluster 14

Category

INTERPRO

INTERPRO

SP_PIR_KEYWORDS

SP_PIR_KEYWORDS

INTERPRO

UP_SEQ_FEATURE

UP_SEQ_FEATURE

GOTERM_MF_FAT

GOTERM_MF_FAT

GOTERM_MF_FAT

GOTERM_MF_FAT

GOTERM_BP_FAT

INTERPRO

UP_SEQ_FEATURE

PIR_SUPERFAMILY

INTERPRO

UP_SEQ_FEATURE

UP_SEQ_FEATURE

INTERPRO

GOTERM_CC_FAT

INTERPRO

SP_PIR_KEYWORDS

Annotation Cluster 15

Category

SP_PIR_KEYWORDS

GOTERM_BP_FAT

GOTERM_BP_FAT

KEGG_PATHWAY

GOTERM_BP_FAT

GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_MF_FAT

Annotation Cluster 16

Category
SP_PIR_KEYWORDS
GOTERM_CC_FAT
SP_PIR_KEYWORDS
KEGG_PATHWAY
UP_SEQ_FEATURE
GOTERM_CC_FAT
GOTERM_CC_FAT
GOTERM_BP_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT
SP_PIR_KEYWORDS
GOTERM_CC_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT
GOTERM_BP_FAT
SP_PIR_KEYWORDS
KEGG_PATHWAY
GOTERM_CC_FAT
GOTERM_BP_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT
GOTERM_CC_FAT
SP_PIR_KEYWORDS
GOTERM_BP_FAT
GOTERM_BP_FAT
KEGG_PATHWAY
GOTERM_BP_FAT
GOTERM_MF_FAT
GOTERM_BP_FAT

Annotation Cluster 17

Category
INTERPRO
INTERPRO
INTERPRO
INTERPRO
PIR_SUPERFAMILY
GOTERM_BP_FAT

INTERPRO
GOTERM_BP_FAT

Annotation Cluster 18

Category
GOTERM_MF_FAT
SP_PIR_KEYWORDS
GOTERM_MF_FAT
GOTERM_MF_FAT
GOTERM_MF_FAT
GOTERM_MF_FAT
INTERPRO

Annotation Cluster 19

Category
GOTERM_MF_FAT
UP_SEQ_FEATURE
UP_SEQ_FEATURE
INTERPRO
SP_PIR_KEYWORDS
SP_PIR_KEYWORDS
INTERPRO
INTERPRO
PIR_SUPERFAMILY
SP_PIR_KEYWORDS
SP_PIR_KEYWORDS
SP_PIR_KEYWORDS
UP_SEQ_FEATURE
UP_SEQ_FEATURE

Annotation Cluster 20

Category
SMART
INTERPRO
INTERPRO
INTERPRO
PIR_SUPERFAMILY
GOTERM_BP_FAT

Annotation Cluster 21

Category
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT

Annotation Cluster 22

Category

KEGG_PATHWAY

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

SP_PIR_KEYWORDS

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

GOTERM_BP_FAT

Annotation Cluster 23

Category

UP_SEQ_FEATURE

UP_SEQ_FEATURE

PIR_SUPERFAMILY

Annotation Cluster 24

Category

BIOCARTA

BIOCARTA

BIOCARTA

Annotation Cluster 25

Category

GOTERM_MF_FAT

GOTERM_BP_FAT

GOTERM_MF_FAT

Annotation Cluster 26

Category

SP_PIR_KEYWORDS

GOTERM_CC_FAT

GOTERM_CC_FAT

GOTERM_CC_FAT

Annotation Cluster 27

Category

SMART

INTERPRO

INTERPRO

Annotation Cluster 28

Category

INTERPRO

SMART

UP_SEQ_FEATURE

UP_SEQ_FEATURE

UP_SEQ_FEATURE

SMART

INTERPRO

INTERPRO

PIR_SUPERFAMILY

INTERPRO

INTERPRO

Annotation Cluster 29

Category

INTERPRO

COG_ONTOLOGY

INTERPRO

Annotation Cluster 30

Category

INTERPRO

INTERPRO

INTERPRO

Annotation Cluster 31

Category

GOTERM_CC_FAT

GOTERM_CC_FAT

GOTERM_CC_FAT

Annotation Cluster 32

Category

PIR_SUPERFAMILY

UP_SEQ_FEATURE

INTERPRO

Annotation Cluster 33

Category

INTERPRO

SP_PIR_KEYWORDS
GOTERM_MF_FAT
INTERPRO
PIR_SUPERFAMILY

Annotation Cluster 34

Category
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT
GOTERM_BP_FAT

Annotation Cluster 35

Category
GOTERM_BP_FAT
GOTERM_MF_FAT
GOTERM_MF_FAT

Enrichment Score: 16.481688970685838

Term

region of interest:Linker 12
region of interest:Coil 2
region of interest:Linker 1
region of interest:Coil 1B
region of interest:Coil 1A
region of interest:Rod
region of interest:Head
Intermediate filament
region of interest:Tail
IPR016044:Filament
IPR018039:Intermediate filament protein, conserved site
PIRSF002282:cytoskeletal keratin
IPR001664:Intermediate filament protein
IPR003054:Type II keratin
GO:0005198~structural molecule activity
site:Stutter
keratin
GO:0005882~intermediate filament
GO:0045095~keratin filament
GO:0045111~intermediate filament cytoskeleton
IPR002957:Keratin, type I

Enrichment Score: 14.207278284320084

Term

GO:0007398~ectoderm development
GO:0008544~epidermis development
keratinization
GO:0031424~keratinization
GO:0030216~keratinocyte differentiation
GO:0009913~epidermal cell differentiation
IPR003267:Small proline-rich
GO:0030855~epithelial cell differentiation
GO:0060429~epithelium development
GO:0001533~cornified envelope

Enrichment Score: 7.4691752796059445

Term

ribonucleoprotein
GO:0030529~ribonucleoprotein complex
ribosomal protein
GO:0003735~structural constituent of ribosome
GO:0005840~ribosome
GO:0000313~organellar ribosome
GO:0005761~mitochondrial ribosome

GO:0006412~translation
GO:0033279~ribosomal subunit
GO:0015935~small ribosomal subunit
GO:0000314~organellar small ribosomal subunit
GO:0005763~mitochondrial small ribosomal subunit

Enrichment Score: 6.406599892920229

Term

GO:0030529~ribonucleoprotein complex
GO:0006396~RNA processing
GO:0003723~RNA binding

Enrichment Score: 5.102192781675423

Term

hsa03050:Proteasome
proteasome
GO:0000502~proteasome complex
GO:0031145~anaphase-promoting complex-dependent proteasomal ubiquitin
GO:0051436~negative regulation of ubiquitin-protein ligase activity
GO:0051444~negative regulation of ubiquitin-protein ligase activity
GO:0051352~negative regulation of ligase activity
IPR001353:Proteasome, subunit alpha/beta
GO:0051437~positive regulation of ubiquitin-protein ligase activity
threonine protease
GO:0051443~positive regulation of ubiquitin-protein ligase activity
GO:0070003~threonine-type peptidase activity
GO:0004298~threonine-type endopeptidase activity
GO:0051439~regulation of ubiquitin-protein ligase activity during mi
proteinase
GO:0051351~positive regulation of ligase activity
GO:0005839~proteasome core complex
GO:0031397~negative regulation of protein ubiquitination
GO:0031398~positive regulation of protein ubiquitination
GO:0051438~regulation of ubiquitin-protein ligase activity
GO:0051340~regulation of ligase activity
GO:0031396~regulation of protein ubiquitination
IPR001353:Proteasome, alpha and beta subunits
GO:0043161~proteasomal ubiquitin-dependent protein catabolic process
GO:0010498~proteasomal protein catabolic process
IPR016050:Proteasome, beta-type subunit, conserved site
GO:0000278~mitotic cell cycle
GO:0031400~negative regulation of protein modification process
protein degradation
IPR000426:Proteasome, alpha-subunit, conserved site
GO:0051248~negative regulation of protein metabolic process
GO:0022402~cell cycle process
GO:0031401~positive regulation of protein modification process
GO:0032269~negative regulation of cellular protein metabolic process

GO:0007049~cell cycle
GO:0044092~negative regulation of molecular function
GO:0043086~negative regulation of catalytic activity
GO:0006511~ubiquitin-dependent protein catabolic process
GO:0010605~negative regulation of macromolecule metabolic process
GO:0032270~positive regulation of cellular protein metabolic process
GO:0031399~regulation of protein modification process

Enrichment Score: 4.462221191827637

Term

IPR013787:S100/CaBP-9k-type, calcium binding, subdomain
IPR001751:S100/CaBP-9k-type, calcium binding
calcium-binding region:2; high affinity
PIRSF002353:S-100 protein
calcium-binding region:1; low affinity
EF hand
domain:EF-hand 2
domain:EF-hand 1
IPR011992:EF-Hand type
IPR018248:EF hand
IPR018249:EF-HAND 2
IPR018247:EF-HAND 1

Enrichment Score: 4.187211849721411

Term

h_smPathway:Spliceosomal Assembly
hsa03040:Spliceosome
SM00651:Sm
mrna splicing
IPR006649:Like-Sm ribonucleoprotein, eukaryotic and archaea-type, co
IPR001163:Like-Sm ribonucleoprotein, core
GO:0030532~small nuclear ribonucleoprotein complex
mrna processing
GO:0008380~RNA splicing
GO:0006396~RNA processing
Spliceosome
GO:0006397~mRNA processing
GO:0005681~spliceosome
GO:0000375~RNA splicing, via transesterification reactions
GO:0000377~RNA splicing, via transesterification reactions with bulg
GO:0000398~nuclear mRNA splicing, via spliceosome
GO:0016071~mRNA metabolic process
rna-binding
GO:0000387~spliceosomal snRNP biogenesis

Enrichment Score: 4.0753555027506945

Term

IPR018363:CD59 antigen, conserved site

SM00134:LU
domain:UPAR/Ly6
IPR016054:Ly-6 antigen / uPA receptor -like
IPR001526:CD59 antigen
PIRSF002021:Ly-6-like protein
gpi-anchor

Enrichment Score: 3.3705598797631997

Term

IPR018069:Whey acidic protein, 4-disulphide core, conserved site
GO:0004867~serine-type endopeptidase inhibitor activity
SM00217:WAP
GO:0030414~peptidase inhibitor activity
IPR008197:Whey acidic protein, 4-disulphide core
Serine protease inhibitor
GO:0004866~endopeptidase inhibitor activity
protease inhibitor
IPR015874:4-disulphide core
site:Reactive bond
domain:WAP
GO:0004857~enzyme inhibitor activity
SM00093:SERPIN
PIRSF001630:serpin
IPR000215:Protease inhibitor I4, serpin
domain:WAP 1
domain:WAP 2

Enrichment Score: 3.2924412815974016

Term

SM00020:Tryp_SPc
Serine protease
domain:Peptidase S1
IPR001314:Peptidase S1A, chymotrypsin
IPR018114:Peptidase S1/S6, chymotrypsin/Hap, active site
GO:0004252~serine-type endopeptidase activity
IPR001254:Peptidase S1 and S6, chymotrypsin/Hap
GO:0008236~serine-type peptidase activity
active site:Charge relay system
GO:0017171~serine hydrolase activity
GO:0004175~endopeptidase activity
GO:0008233~peptidase activity
Protease
GO:0070011~peptidase activity, acting on L-amino acid peptides

Enrichment Score: 2.7498696018301723

Term

Secreted
signal

GO:0005576~extracellular region

Enrichment Score: 2.6645404281912803

Term

tumor antigen

domain:MAGE

IPR002190:MAGE protein

Enrichment Score: 2.5720541786430298

Term

GO:0070013~intracellular organelle lumen

GO:0031974~membrane-enclosed lumen

GO:0043233~organelle lumen

GO:0005730~nucleolus

GO:0031981~nuclear lumen

Enrichment Score: 2.419260644222206

Term

IPR017936:Thioredoxin-like

IPR006662:Thioredoxin-like subdomain

redox-active disulfide

Redox-active center

IPR017937:Thioredoxin, conserved site

domain:Thioredoxin 2

domain:Thioredoxin 1

GO:0016864~intramolecular oxidoreductase activity, transposing S-S b

GO:0003756~protein disulfide isomerase activity

GO:0016860~intramolecular oxidoreductase activity

GO:0016862~intramolecular oxidoreductase activity, interconverting k

GO:0045454~cell redox homeostasis

IPR005788:Disulphide isomerase

site:Contributes to redox potential value

PIRSF001487:protein disulfide-isomerase

IPR012335:Thioredoxin fold

site:Lowers pKa of C-terminal Cys of second active site

site:Lowers pKa of C-terminal Cys of first active site

IPR005792:Protein disulphide isomerase

GO:0005788~endoplasmic reticulum lumen

IPR013766:Thioredoxin domain

intramolecular oxidoreductase

Enrichment Score: 2.379794611005659

Term

tricarboxylic acid cycle

GO:0009060~aerobic respiration

GO:0045333~cellular respiration

hsa00020:Citrate cycle (TCA cycle)

GO:0006099~tricarboxylic acid cycle

GO:0046356~acetyl-CoA catabolic process
GO:0006084~acetyl-CoA metabolic process
GO:0051187~cofactor catabolic process
GO:0009109~coenzyme catabolic process
GO:0015980~energy derivation by oxidation of organic compounds
GO:0000104~succinate dehydrogenase activity

Enrichment Score: 2.3764889467219867

Term

mitochondrion
GO:0044429~mitochondrial part
transit peptide
hsa05012:Parkinson's disease
transit peptide:Mitochondrion
GO:0005759~mitochondrial matrix
GO:0031980~mitochondrial lumen
GO:0045333~cellular respiration
GO:0005739~mitochondrion
GO:0031967~organelle envelope
GO:0031975~envelope
mitochondrion inner membrane
GO:0031966~mitochondrial membrane
GO:0005740~mitochondrial envelope
GO:0044455~mitochondrial membrane part
GO:0015980~energy derivation by oxidation of organic compounds
electron transport
hsa05016:Huntington's disease
GO:0019866~organelle inner membrane
GO:0022904~respiratory electron transport chain
GO:0005746~mitochondrial respiratory chain
GO:0070469~respiratory chain
GO:0005743~mitochondrial inner membrane
respiratory chain
GO:0042775~mitochondrial ATP synthesis coupled electron transport
GO:0042773~ATP synthesis coupled electron transport
hsa00190:Oxidative phosphorylation
GO:0006091~generation of precursor metabolites and energy
GO:0016655~oxidoreductase activity, acting on NADH or NADPH, quinone
GO:0022900~electron transport chain

Enrichment Score: 2.3304572277620172

Term

IPR003008:Tubulin/FtsZ, GTPase domain
IPR018316:Tubulin/FtsZ, 2-layer sandwich domain
IPR017975:Tubulin, conserved site
IPR000217:Tubulin
PIRSF002306:tubulin
GO:0051258~protein polymerization

IPR002452:Alpha tubulin
GO:0043623~cellular protein complex assembly

Enrichment Score: 2.259829326076668

Term

GO:0015293~symporter activity
Symport
GO:0015370~solute:sodium symporter activity
GO:0015294~solute:cation symporter activity
GO:0005326~neurotransmitter transporter activity
GO:0005328~neurotransmitter:sodium symporter activity
IPR000175:Sodium:neurotransmitter symporter

Enrichment Score: 2.1646931511556664

Term

GO:0046870~cadmium ion binding
metal ion-binding site:Divalent metal cation; cluster B
metal ion-binding site:Divalent metal cation; cluster A
IPR018064:Metallothionein, vertebrate, metal binding site
metal-thiolate cluster
metal binding
IPR003019:Metallothionein superfamily, eukaryotic
IPR000006:Metallothionein, vertebrate
PIRSF002564:metallothionein
copper
chelation
cadmium
region of interest:Beta
region of interest:Alpha

Enrichment Score: 2.148913924442017

Term

SM00097:WNT1
IPR005817:Wnt superfamily
IPR005816:Secreted growth factor Wnt protein
IPR018161:Secreted growth factor Wnt protein, conserved site
PIRSF001784:int-1 transforming protein
GO:0007223~Wnt receptor signaling pathway, calcium modulating pathway

Enrichment Score: 2.146428276323983

Term

GO:0022404~molting cycle process
GO:0001942~hair follicle development
GO:0022405~hair cycle process
GO:0042633~hair cycle
GO:0042303~molting cycle

Enrichment Score: 2.08993132746172

Term

hsa00030:Pentose phosphate pathway
GO:0016052~carbohydrate catabolic process
GO:0006007~glucose catabolic process
GO:0019748~secondary metabolic process
GO:0046365~monosaccharide catabolic process
GO:0044275~cellular carbohydrate catabolic process
GO:0046496~nicotinamide nucleotide metabolic process
GO:0006769~nicotinamide metabolic process
GO:0009820~alkaloid metabolic process
GO:0019320~hexose catabolic process
GO:0019362~pyridine nucleotide metabolic process
GO:0006006~glucose metabolic process
GO:0046164~alcohol catabolic process
pentose shunt
GO:0006098~pentose-phosphate shunt
GO:0006739~NADP metabolic process
GO:0019318~hexose metabolic process
GO:0006733~oxidoreduction coenzyme metabolic process
GO:0019321~pentose metabolic process
GO:0043603~cellular amide metabolic process
GO:0006096~glycolysis
GO:0005996~monosaccharide metabolic process

Enrichment Score: 2.0122183380477385

Term

region of interest:MHC class I alpha-2 like
region of interest:MHC class I alpha-1 like
PIRSF037807:retinoic acid early inducible protein 1

Enrichment Score: 2.00986841033491

Term

h_ranPathway:Cycling of Ran in nucleocytoplasmic transport
h_npcPathway:Mechanism of Protein Import into the Nucleus
h_ranMSpathway:Role of Ran in mitotic spindle regulation

Enrichment Score: 1.8479790211462275

Term

GO:0016866~intramolecular transferase activity
GO:0001522~pseudouridine synthesis
GO:0009982~pseudouridine synthase activity

Enrichment Score: 1.8424748512622717

Term

mitochondrion outer membrane
GO:0005741~mitochondrial outer membrane
GO:0031968~organelle outer membrane
GO:0019867~outer membrane

Enrichment Score: 1.7868766291085558

Term

SM00212:UBCc

IPR000608:Ubiquitin-conjugating enzyme, E2

IPR016135:Ubiquitin-conjugating enzyme/RWD-like

Enrichment Score: 1.7725296285956527

Term

IPR003879:Butyrophysin-like

SM00336:BBOX

zinc finger region:B box-type

zinc finger region:RING-type

domain:B30.2/SPRY

SM00589:PRY

IPR000315:Zinc finger, B-box

IPR001870:B302 (SPRY)-like

PIRSF001733:tripartite motif-containing protein

IPR006574:SPRY-associated

IPR003877:SPla/Ryanodine receptor SPRY

Enrichment Score: 1.7617183849028941

Term

IPR001125:Recoverin

Signal transduction mechanisms / Cytoskeleton / Cell division and ch

IPR018248:EF hand

Enrichment Score: 1.7250058816775624

Term

IPR000566:Lipocalin-related protein and Bos/Can/Equ allergen

IPR012674:Calycin

IPR002345:Lipocalin

Enrichment Score: 1.6898436338801728

Term

GO:0015934~large ribosomal subunit

GO:0000315~organellar large ribosomal subunit

GO:0005762~mitochondrial large ribosomal subunit

Enrichment Score: 1.6308236999321186

Term

PIRSF001467:peptidylprolyl isomerase

domain:PPIase cyclophilin-type

IPR002130:Peptidyl-prolyl cis-trans isomerase, cyclophilin-type

Enrichment Score: 1.6245617340384846

Term

IPR000866:Alkyl hydroperoxide reductase/ Thiol specific antioxidant/

antioxidant

GO:0016209~antioxidant activity

IPR019479:Peroxiredoxin, C-terminal

PIRSF000239:alkyl hydroperoxide reductase C22 protein

Enrichment Score: 1.5736127165604337

Term

GO:0022613~ribonucleoprotein complex biogenesis

GO:0034660~ncRNA metabolic process

GO:0042254~ribosome biogenesis

GO:0006364~rRNA processing

Enrichment Score: 1.5339722611672193

Term

GO:0000041~transition metal ion transport

GO:0046915~transition metal ion transmembrane transporter activity

GO:0005385~zinc ion transmembrane transporter activity

Count	%	PValue
34	2.7664768	4.0201259
34	2.7664768	4.0201259
35	2.8478437	1.1053562
35	2.8478437	1.1053562
35	2.8478437	1.1053562
35	2.8478437	1.9906582
35	2.8478437	6.2183468
35	2.8478437	7.6055862
34	2.7664768	2.2874038
33	2.6851098	1.8927981
33	2.6851098	1.8927981
32	2.6037428	2.0352980
32	2.6037428	3.5097657
19	1.5459723	3.1533749
96	7.8112286	1.1976644
19	1.5459723	9.1772368
33	2.6851098	2.5771274
37	3.0105777	1.7016427
24	1.9528071	2.9095418
37	3.0105777	3.0626252
12	0.9764035	4.7047659

Count	%	PValue
60	4.8820179	5.1121634
56	4.5565500	1.0030547
23	1.8714401	1.0611751
24	1.9528071	2.8341785
29	2.3596419	3.8295508
30	2.4410089	7.1734982
17	1.3832384	1.2522632
35	2.8478437	2.3996869
40	3.2546786	7.3200851
11	0.8950366	9.0746166

Count	%	PValue
60	4.8820179	6.5395016
84	6.8348250	8.1045582
39	3.1733116	1.0960461
36	2.9292107	7.3286800
41	3.3360455	1.4460394
17	1.3832384	9.4218720
17	1.3832384	9.4218720

47	3.8242473	2.9430617
26	2.1155410	2.9616376
14	1.1391375	3.9894873
7	0.5695687	0.0011105
7	0.5695687	0.0011105

Count	%	PValue
84	6.8348250	8.1045582
62	5.0447518	9.1762050
70	5.6956875	8.1060235

Count	%	PValue
20	1.6273393	1.5442547
20	1.6273393	5.6787879
20	1.6273393	2.0945893
20	1.6273393	3.5639020
20	1.6273393	3.5639020
20	1.6273393	6.1305875
20	1.6273393	6.1305875
11	0.8950366	7.6647842
20	1.6273393	7.9702204
11	0.8950366	9.4411086
20	1.6273393	1.3249589
11	0.8950366	1.4196293
11	0.8950366	1.4196293
20	1.6273393	1.6948343
10	0.8136696	2.2492498
20	1.6273393	2.7319164
11	0.8950366	2.9562457
20	1.6273393	3.4436667
21	1.7087062	6.3699101
20	1.6273393	8.3162608
20	1.6273393	1.5431373
21	1.7087062	1.1207663
8	0.6509357	1.1776982
21	1.7087062	1.5262168
21	1.7087062	1.5262168
7	0.5695687	5.1832805
46	3.7428803	1.0874023
21	1.7087062	1.4943022
7	0.5695687	8.0486743
5	0.4068348	0.0010453
25	2.0341741	0.0020469
57	4.6379170	0.0029668
24	1.9528071	0.0043039
23	1.8714401	0.0055621

72	5.8584214	0.0065072
36	2.9292107	0.0074546
30	2.4410089	0.0140543
26	2.1155410	0.0248764
63	5.1261187	0.0456692
24	1.9528071	0.0473336
29	2.3596419	0.0475166

Count	%	PValue
14	1.1391375	3.3234591
14	1.1391375	5.8312106
12	0.9764035	1.1728419
12	0.9764035	1.8406431
10	0.8136696	4.4198212
13	1.0577705	2.9774970
23	1.8714401	0.0025335
22	1.7900732	0.0054016
25	2.0341741	0.0220088
16	1.3018714	0.0234620
23	1.8714401	0.0258092
23	1.8714401	0.0282834

Count	%	PValue
10	0.8136696	4.9465042
25	2.0341741	8.7207000
9	0.7323026	1.5206364
33	2.6851098	2.5163213
9	0.7323026	4.8038702
9	0.7323026	1.3265708
10	0.8136696	2.1658071
35	2.8478437	3.9393400
39	3.1733116	4.9395585
62	5.0447518	9.1762050
20	1.6273393	1.6871967
40	3.2546786	3.1351801
22	1.7900732	3.8592427
23	1.8714401	6.9547685
23	1.8714401	6.9547685
23	1.8714401	6.9547685
41	3.3360455	0.0025434
51	4.1497152	0.0038205
7	0.5695687	0.0102163

Count	%	PValue
10	0.8136696	5.0082115

8	0.6509357	1.2916716
9	0.7323026	1.5510537
8	0.6509357	3.4930076
8	0.6509357	8.6480757
5	0.4068348	0.0017789
17	1.3832384	0.0055049

Count	%	PValue
8	0.6509357	6.2430830
20	1.6273393	6.5056014
8	0.6509357	7.6361075
26	2.1155410	1.9870911
8	0.6509357	2.0828872
17	1.3832384	3.1067505
24	1.9528071	6.7944843
19	1.5459723	1.1269227
5	0.4068348	0.0010453
10	0.8136696	0.0017207
5	0.4068348	0.0024274
31	2.5223759	0.0032096
8	0.6509357	0.0064648
8	0.6509357	0.0103774
8	0.6509357	0.0143083
3	0.2441008	0.0349488
3	0.2441008	0.0349488

Count	%	PValue
20	1.6273393	2.3951210
23	1.8714401	3.8250911
19	1.5459723	1.0553912
19	1.5459723	1.3598527
19	1.5459723	1.5422651
24	1.9528071	1.7322301
20	1.6273393	1.9029479
25	2.0341741	5.9900052
26	2.1155410	6.1665616
25	2.0341741	7.0453541
42	3.4174125	8.7100951
53	4.3124491	0.0107492
44	3.5801464	0.0139627
48	3.9056143	0.0354005

Count	%	PValue
153	12.449145	2.7037436
227	18.470301	0.0441578

162 13.181448 0.0471430

Count	%	PValue
10	0.8136696	4.5502629
8	0.6509357	0.0032518
8	0.6509357	0.0068581

Count	%	PValue
163	13.262815	3.3865876
168	13.669650	4.6292119
165	13.425549	4.9696877
63	5.1261187	0.0384481
120	9.7640358	0.0460527

Count	%	PValue
11	0.8950366	7.5451380
6	0.4882017	2.3081260
5	0.4068348	8.8032724
10	0.8136696	9.9266924
8	0.6509357	0.0011243
5	0.4068348	0.0015326
5	0.4068348	0.0015326
5	0.4068348	0.0017771
5	0.4068348	0.0017771
9	0.7323026	0.0027891
5	0.4068348	0.0028089
12	0.9764035	0.0032730
4	0.3254678	0.0048598
4	0.3254678	0.0072194
4	0.3254678	0.0119965
14	1.1391375	0.0147966
3	0.2441008	0.0218773
3	0.2441008	0.0218773
3	0.2441008	0.0236490
12	0.9764035	0.0252255
6	0.4882017	0.0291602
4	0.3254678	0.0353871

Count	%	PValue
7	0.5695687	0.0014446
9	0.7323026	0.0020489
16	1.3018714	0.0022939
8	0.6509357	0.0027753
7	0.5695687	0.0036636

7	0.5695687	0.0036636
8	0.6509357	0.0041611
8	0.6509357	0.0041611
7	0.5695687	0.0070132
19	1.5459723	0.0091571
3	0.2441008	0.0236127

Count	%	PValue
89	7.2416598	9.2991509
69	5.6143205	5.7138697
52	4.2310821	1.3223490
20	1.6273393	4.1308413
49	3.9869812	5.8607388
31	2.5223759	7.0103118
31	2.5223759	7.0103118
16	1.3018714	0.0022939
102	8.2994304	0.0026603
63	5.1261187	0.0036575
63	5.1261187	0.0039414
23	1.8714401	0.0049002
43	3.4987794	0.0052869
45	3.6615134	0.0056507
18	1.4646053	0.0070928
19	1.5459723	0.0091571
14	1.1391375	0.0096397
21	1.7087062	0.0099410
36	2.9292107	0.0105682
11	0.8950366	0.0109076
11	0.8950366	0.0140875
12	0.9764035	0.0162224
32	2.6037428	0.0286583
10	0.8136696	0.0329187
9	0.7323026	0.0351617
9	0.7323026	0.0351617
15	1.2205044	0.0360202
31	2.5223759	0.0370731
8	0.6509357	0.0395196
14	1.1391375	0.0466898

Count	%	PValue
8	0.6509357	6.6404140
7	0.5695687	0.0023706
7	0.5695687	0.0030314
7	0.5695687	0.0038205
7	0.5695687	0.0047940
10	0.8136696	0.0053321

4 0.3254678 0.0175860
19 1.5459723 0.0277160

Count	%	PValue
21	1.7087062	6.0599696
17	1.3832384	0.0015117
11	0.8950366	0.0017834
15	1.2205044	0.0034919
6	0.4882017	0.0179785
5	0.4068348	0.0384099
5	0.4068348	0.0385224

Count	%	PValue
5	0.4068348	0.0028089
5	0.4068348	0.0036253
5	0.4068348	0.0036253
5	0.4068348	0.0042017
5	0.4068348	0.0050825
6	0.4882017	0.0053507
5	0.4068348	0.0059780
5	0.4068348	0.0059780
5	0.4068348	0.0069796
10	0.8136696	0.0086320
4	0.3254678	0.0108716
4	0.3254678	0.0108716
4	0.3254678	0.0214651
4	0.3254678	0.0214651

Count	%	PValue
6	0.4882017	0.0033887
6	0.4882017	0.0064827
6	0.4882017	0.0064827
6	0.4882017	0.0064827
6	0.4882017	0.0116516
6	0.4882017	0.0118798

Count	%	PValue
9	0.7323026	0.0067336
9	0.7323026	0.0067336
9	0.7323026	0.0067336
9	0.7323026	0.0077902
9	0.7323026	0.0077902

Count	%	PValue
8	0.6509357	7.0641951
18	1.4646053	0.0010979
12	0.9764035	0.0016516
14	1.1391375	0.0025082
13	1.0577705	0.0028814
14	1.1391375	0.0048173
9	0.7323026	0.0049489
9	0.7323026	0.0049489
9	0.7323026	0.0057891
12	0.9764035	0.0066843
9	0.7323026	0.0067336
20	1.6273393	0.0080882
13	1.0577705	0.0085359
3	0.2441008	0.0113105
4	0.3254678	0.0194837
5	0.4068348	0.0202308
22	1.7900732	0.0216581
9	0.7323026	0.0236114
4	0.3254678	0.0345541
9	0.7323026	0.0351617
8	0.6509357	0.0388002
23	1.8714401	0.0497476

Count	%	PValue
4	0.3254678	0.0043275
4	0.3254678	0.0043275
3	0.2441008	0.0490750

Count	%	PValue
4	0.3254678	0.0045523
5	0.4068348	0.0054468
4	0.3254678	0.0376715

Count	%	PValue
7	0.5695687	0.0058083
5	0.4068348	0.0124059
4	0.3254678	0.0396622

Count	%	PValue
13	1.0577705	0.0012697
13	1.0577705	0.0248527
14	1.1391375	0.0322224
14	1.1391375	0.0419627

Count	%	PValue
8	0.6509357	0.0074260
8	0.6509357	0.0163041
8	0.6509357	0.0360008

Count	%	PValue
11	0.8950366	0.0067726
11	0.8950366	0.0069062
10	0.8136696	0.0070277
23	1.8714401	0.0134109
12	0.9764035	0.0136552
8	0.6509357	0.0173330
11	0.8950366	0.0187638
12	0.9764035	0.0267767
5	0.4068348	0.0350344
8	0.6509357	0.0360008
11	0.8950366	0.0480658

Count	%	PValue
6	0.4882017	0.0124658
7	0.5695687	0.0177319
16	1.3018714	0.0234620

Count	%	PValue
7	0.5695687	0.0164440
7	0.5695687	0.0190128
6	0.4882017	0.0213760

Count	%	PValue
12	0.9764035	0.0071095
5	0.4068348	0.0346188
5	0.4068348	0.0346188

Count	%	PValue
4	0.3254678	0.0119965
5	0.4068348	0.0236265
5	0.4068348	0.0451932

Count	%	PValue
4	0.3254678	0.0080911

4	0.3254678	0.0155544
8	0.6509357	0.0323583
3	0.2441008	0.0377119
3	0.2441008	0.0490750

Count	%	PValue
22	1.7900732	0.0111100
25	2.0341741	0.0247820
15	1.2205044	0.0382729
12	0.9764035	0.0481730

Count	%	PValue
11	0.8950366	0.0217048
6	0.4882017	0.0290502
4	0.3254678	0.0396622

Genes	List	Tota
KRT6C, KRT6A, KRT6B, KRT23, KRT33B, KRT81, KRT9, KRT25, KRT1		1206
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT1		1206
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT1		1206
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT1		1206
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT1		1206
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT1		1206
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT1		1206
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT1		1208
KRT6C, KRT6A, KRT6B, LMNB2, KRT33B, KRT81, KRT9, KRT25, KRT1		1206
KRT6C, KRT6A, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT25, KRT1		1095
KRT6C, KRT6A, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT25, KRT1		1095
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT81, KRT9, KRT25, KRT2		561
KRT6C, KRT6A, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT25, KRT1		1095
KRT6C, KRT6A, KRT81, KRT72, KRT75, KRT74, KRT80, KRT77, KRT1		1095
LOR, RPL36A, TUBB2A, RPL22L1, KRT33B, KRT81, KRT80, RPL39L,		853
KRT6C, KRT6A, KRT6B, KRT31, KRT34, KRT33B, KRT72, KRT75, KF		1206
KRT6C, KRT6A, KRT6B, KRT23, KRT33B, KRT81, KRT9, KRT25, KRT1		1208
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT1		908
KRT6C, KRT6A, KRT6B, KRT10, KRT81, KRT9, KRT72, KRT75, KRT7		908
KRT6C, KRT6A, KRT6B, LMNB2, KRT23, KRT33B, KRT81, KRT9, KRT1		908
KRT9, KRT25, KRT28, KRT17, KRT16, KRT15, KRT14, KRT31, KRT1		1095

Genes	List	Tota
LOR, PPARD, LCE3A, PTGS2, S100A7, SPINK5, PLOD1, LCE2D, KRT1		924
LOR, PPARD, PTGS2, LCE3A, S100A7, SPINK5, PLOD1, LCE2D, KRT1		924
LOR, LCE4A, LCE3A, LCE5A, LCE6A, LCE2C, LCE2B, LCE2A, SPRR2		1208
LOR, LCE4A, LCE3A, LCE5A, LCE6A, LCE2C, LCE2B, LCE2A, SPRR2		924
LOR, LCE3A, S100A7, LCE5A, LCE1B, SPRR2F, SPRR2E, LCE1A, SE		924
LOR, LCE3A, S100A7, LCE5A, LCE1B, SPRR2F, SPRR2E, LCE1A, SE		924
LCE5A, LCE2C, LCE2B, SPRR2F, LCE1B, LCE2A, SPRR2E, LCE1A, I		1095
LOR, LCE3A, S100A7, LCE5A, LCE1B, SPRR2F, SPRR2E, LCE1A, SE		924
LOR, LCE3A, S100A7, LCE5A, HOXA11, LCE1B, SPRR2F, SPRR2E, I		924
LOR, SPRR2D, SPRR1A, RPTN, SPRR1B, SPRR2A, TGM1, SPRR2F, SE		908

Genes	List	Tota
RALY, RPL36A, SNRPD3, LSM6, SNRPD1, RPL22L1, PCBP4, PCBP1,		1208
RALY, RPP38, RPL36A, SNRPD3, LSM6, SNRPD1, RPS6KB2, RPL22L1		908
MRPS17, RPL36A, MRPS15, MRPS12, RPS6KB2, RPL22L1, RPL39, MF		1208
MRPS17, RPL36A, MRPS15, MRPS12, RPL22L1, RPL39, MRPL11, RPI		853
MRPS17, RPL36A, MRPS15, MRPS12, RPS6KB2, RPL22L1, RPL39, MF		908
MRPL1, MRPS17, MRPL51, MRPS15, MRPS22, MRPS12, MRPL9, MRPS2		908
MRPL1, MRPS17, MRPL51, MRPS15, MRPS22, MRPS12, MRPL9, MRPS2		908

MRPS17, RPL36A, MRPS15, PSTK, MRPS12, PABPC4, RPS6KB2, RPL2	924
MRPS17, MRPS15, MRPS12, RPL39, MRPL11, RPS25, RPL30, RPL7,	908
MRPS17, MRPS15, MRPS22, MRPS12, MRPS21, MRPS6, RPS7, RPS25,	908
MRPS17, MRPS18C, MRPS15, MRPS9, MRPS18A, MRPS22, MRPS21	908
MRPS17, MRPS18C, MRPS15, MRPS9, MRPS18A, MRPS22, MRPS21	908

Genes	List	Tota
RALY, RPP38, RPL36A, SNRPD3, LSM6, SNRPD1, RPS6KB2, RPL22L1		908
RPP38, RALY, RPL36A, LSM6, SNRPD3, SNRPD1, RP9, YBX1, PCBP1		924
RALY, RPL36A, LSM6, SNRPD1, TIMM50, YBX1, PCBP4, PCBP1, U2A		853

Genes	List	Tota
SHFM1, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		325
SHFM1, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		1208
SHFM1, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		908
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
PSMA2, PSMB5, PSMB4, PSMB7, PSMB1, PSMA5, PSMA4, PSMB3, PSM		1095
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
PSMA2, PSMB5, PSMB4, PSMB7, PSMB1, PSMA5, PSMA4, PSMB3, PSM		1208
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
PSMA2, PSMB5, PSMB4, PSMB7, PSMB1, PSMA5, PSMA4, PSMB3, PSM		853
PSMA2, PSMB5, PSMB4, PSMB7, PSMB1, PSMA5, PSMA4, PSMB3, PSM		853
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
PSMA2, PSMB5, PSMB4, PSMB1, PSMA5, PSMA4, PSMB3, PSMA3, PSM		1208
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
PSMA2, PSMB5, PSMB4, PSMB7, PSMB1, PSMA5, PSMA4, PSMB3, PSM		908
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
NHLRC1, UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PS		924
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4, PSM		924
NHLRC1, UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PS		924
PSMB5, PSMB4, PSMB7, PSMB1, PSMA5, PSMB3, PSMB2, PSMA7		1095
UBE2G2, UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PS		924
UBE2G2, UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PS		924
PSMB5, PSMB4, PSMB7, PSMB1, PSMA4, PSMB3, PSMB2		1095
TUBB2A, KATNB1, PKMYT1, PTTG2, PTTG1, RCC1, PSMA7, PSMB5, F		924
NF2, UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSMB7, PSMB1, PSMC4		924
PSMA2, PSMB1, PSMA4, PSMA3, PSMD7, PSMD8, RPS27A		1208
PSMA2, PSMA5, PSMA4, PSMA3, PSMA7		1095
IGF2BP1, PSMA7, PSMB5, PSMB4, PSMB7, PSMB1, PSMB3, PSMB2, F		924
TUBB2A, PKMYT1, PTTG2, PTTG1, STRA8, PCBP4, PSMD2, PSMD4, F		924
IGF2, NHLRC1, IL34, UBE2C, PSMA7, IL11, PSMB5, PSMA2, PSMB4		924
NF2, IGF2BP1, IGF2, UBE2C, PSMA7, PSMB5, PSMA2, PSMB4, PSME		924

STEAP3, S100A6, TUBB2A, PKMYT1, PTTG2, PTTG1, STRA8, PCBP4,	924
HR, SFN, PSMA7, PSMB5, PSMB4, PSMB7, PSMB1, WWP2, PSMB3, PS	924
SFN, PSMA7, PSMB5, PSMB4, PSMB7, PSMB1, PSMB3, PSMB2, PSMD2	924
USP5, UCHL1, UBE2G2, PSMA7, PSMB5, PSMB4, PSMB7, PSMB1, PSM	924
PPARD, HR, MAF1, NR2E1, KCNIP3, TBPL2, SAP30, STRA8, WWP2,	924
IGF2, NHLRC1, IL34, UBE2C, PSMA7, IL11, PSMB5, PSMA2, PSMB4	924
NHLRC1, IL34, PSMA7, IL11, PSMB5, MAP3K6, PSMB4, PSMB7, PSM	924

Genes	List	Tota
S100A4, S100A6, S100P, S100A16, S100A8, S100A7, S100A9, S1C		1095
S100A4, S100A6, S100P, S100A16, S100A8, S100A7, S100A9, S1C		1095
S100A4, S100A16, S100P, S100A8, S100A7, RPTN, S100A9, S100A		1206
S100A4, S100A6, S100P, S100A8, S100A7, S100A9, S100A11, S1C		561
S100A4, S100A16, S100P, S100A8, RPTN, S100A9, S100A11, S10C		1206
S100A4, S100A6, S100P, HPCAL1, S100A8, S100A7, S100A9, S10C		1208
S100A4, S100A6, S100A16, S100P, HPCAL1, S100A8, NCALD, TNNC		1206
S100A4, S100A6, S100A16, HPCAL1, S100P, S100A8, NCALD, TNNC		1206
S100A4, S100A6, S100A8, TNNC1, S100A7, S100A9, NCS1, NECAB2		1095
S100A6, HPCAL1, S100A8, TNNC1, NCALD, S100A9, S100A11, NCS1		1095
S100A4, S100A6, S100A16, S100P, HPCAL1, S100A8, NCALD, TNNC		1095
S100A4, S100A6, S100A16, S100P, HPCAL1, S100A8, NCALD, TNNC		1095

Genes	List	Tota
SNRPA1, SNRPD3, SNRPB2, U2AF1, SNRPD1, SNRPA, SNRPC, SNRPF,		94
SNRPA1, NHP2L1, MAGOH, SNRPD3, LSM6, SNRPB2, SNRPD1, SF3B4,		325
LSM6, SNRPD3, SNRPD1, LSM5, LSM3, LSM2, SNRPF, SNRPE, SNRPC		514
RALY, NHP2L1, LSM6, SNRPD3, SNRPB2, SNRPD1, SF3B4, YBX1, SF		1208
LSM6, SNRPD3, SNRPD1, LSM5, LSM3, LSM2, SNRPF, SNRPE, SNRPC		1095
LSM6, SNRPD3, SNRPD1, LSM5, LSM3, LSM2, SNRPF, SNRPE, SNRPC		1095
SNRPA1, LSM6, SNRPD3, SNRPB2, SNRPD1, PHF5A, SNRPC, SNRPF,		908
RALY, NHP2L1, LSM6, SNRPD3, SNRPB2, SNRPD1, SF3B4, YBX1, SF		1208
POLR2H, RALY, RPL36A, POLR2F, NHP2L1, LSM6, SNRPD3, SNRPB2,		924
RPP38, RALY, RPL36A, LSM6, SNRPD3, SNRPD1, RP9, YBX1, PCBP1		924
RALY, SNRPA1, NHP2L1, MAGOH, SNRPD3, SNRPB2, SNRPD1, SF3B4,		1208
POLR2H, RALY, ZC3H3, POLR2F, RPL36A, NHP2L1, LSM6, SNRPD3,		924
RALY, TXNL4B, SNRPA1, NHP2L1, MAGOH, SNRPD3, SNRPB2, SNRPD1		908
POLR2H, SNRPA1, RPL36A, POLR2F, NHP2L1, MAGOH, SNRPD3, PTBF		924
POLR2H, SNRPA1, RPL36A, POLR2F, NHP2L1, MAGOH, SNRPD3, PTBF		924
POLR2H, SNRPA1, RPL36A, POLR2F, NHP2L1, MAGOH, SNRPD3, PTBF		924
POLR2H, RALY, ZC3H3, POLR2F, RPL36A, NHP2L1, LSM6, SNRPD3,		924
RALY, RPL36A, LSM6, SNRPD3, TIMM50, YBX1, PCBP4, PCBP1, LSM		1208
SNRPD3, WDR77, SNRPD1, SNRPC, SNRPF, SNRPE, SNRPG		924

Genes	List	Tota
LYPD2, LYPD1, SLURP1, LYNX1, LYPD3, LY6D, LY6E, LYPD5, LY6C		1095

LYPD2, LYPD1, SLURP1, LYNX1, LYPD3, LY6D, LY6E, PLAUR	514
LYPD2, LYPD1, SLURP1, LYNX1, LY6D, LY6E, LYPD5, LY6G6C, LY6	1206
LYPD2, LYPD1, SLURP1, LYNX1, LYPD3, LY6D, LY6E, PLAUR	1095
LYPD2, SLURP1, LYNX1, LYPD3, LY6D, LY6E, LYPD5, PLAUR	1095
LYPD2, LYNX1, LY6D, LY6E, LY6K	561
LYPD2, LYPD1, LYPD3, LYPD5, MFI2, PRSS41, LY6G6C, RTN4R, LY	1208

Genes	List	Tota
WFDC12, WFIKKN2, UMODL1, PI3, SLPI, WFDC1, WFDC5, WFDC3		1095
WFIKKN2, LRIT2, SERPINA12, SPINT1, SERPINH1, SPINK5, SPINK7		853
WFDC12, WFIKKN2, UMODL1, PI3, SLPI, WFDC1, WFDC5, WFDC3		514
WFIKKN2, LRIT2, SERPINA12, PTTG2, PTTG1, SERPINH1, SPINK5,		853
WFDC12, WFIKKN2, UMODL1, PI3, SLPI, WFDC1, WFDC5, WFDC3		1095
WFIKKN2, SERPINA12, SPINT1, SPINK5, SPINK7, WFDC12, PI3, SE		1208
WFIKKN2, LRIT2, SERPINA12, PTTG2, PTTG1, SERPINH1, SPINK5,		853
KNG1, WFIKKN2, SERPINA12, SPINT1, R3HDML, SPINK5, SPINK7, W		1208
WFDC12, PI3, SLPI, WFDC5, WFDC3		1095
WFIKKN2, SERPINB2, SPINT1, SERPINB11, SERPINB4, SERPINB12,		1206
WFDC12, WFIKKN2, UMODL1, PI3, WFDC1		1206
WFIKKN2, LRIT2, SERPINA12, RTKN, PTTG2, SFN, PTTG1, SERPINH		853
SERPINA12, SERPINB2, SERPINB11, SERPINB4, SERPINB12, SERPIN		514
SERPINA12, SERPINB2, SERPINB11, SERPINB4, SERPINB12, SERPIN		561
SERPINA12, SERPINB2, SERPINB11, SERPINB4, SERPINB12, SERPIN		1095
SLPI, WFDC5, WFDC3		1206
SLPI, WFDC5, WFDC3		1206

Genes	List	Tota
KLK6, KLK7, KLK8, KLK9, PRSS41, KLK5, KLK1, TMPRSS5, HTRA2,		514
KLK6, KLK7, KLK8, KLK9, PRSS41, KLK5, KLK1, TMPRSS5, PARL,		1208
KLK6, KLK7, KLK8, KLK9, PRSS41, KLK5, KLK1, TMPRSS5, TMPRSS		1206
KLK6, KLK7, KLK8, KLK9, PRSS41, KLK5, KLK1, TMPRSS5, TMPRSS		1095
KLK6, KLK7, KLK8, KLK9, PRSS41, KLK5, KLK1, TMPRSS5, TMPRSS		1095
KLK6, KLK7, KLK8, KLK9, PRSS41, KLK5, KLK1, TMPRSS5, PWP2,		853
KLK6, KLK7, KLK8, KLK9, PRSS41, KLK5, KLK1, TMPRSS5, HTRA2,		1095
PRSS41, HTRA2, PARL, PRSS3, PCSK9, KLK10, PRSS33, KLK15, TM		853
PRSS41, NOTUM, HTRA2, PRSS3, PCSK9, KLK10, PRSS33, PTS, KLK		1206
PRSS41, HTRA2, PARL, PRSS3, PCSK9, KLK10, PRSS33, KLK15, TM		853
PDIA3, USP5, PRSS41, UCHL1, RCE1, PSMA7, PSMB5, PSMB4, PSME		853
PDIA3, UCHL1, PRSS41, RCE1, SPINK5, PARL, HTRA2, KLK10, PRS		853
USP5, PRSS41, UCHL1, PSMA7, SPINK5, PSMB5, PSMB4, PSMB7, HT		1208
PDIA3, USP5, PRSS41, UCHL1, RCE1, PSMA7, PSMB5, PSMB4, PSME		853

Genes	List	Tota
PVR, S100A8, S100A7, S100A9, IL17RE, NOTUM, IL11, REG3A, PC		1208
PVR, LYPD2, LYPD1, LYPD3, PTGS2, LYPD5, L1CAM, NOTUM, PLOD1		1208

PVR, S100A7, IL17RE, NOTUM, IL11, REG3A, PGLYRP4, ST3GAL4, 908

Genes	List	Tota
MAGED1, TYR, MAGEA12, TACSTD2, MAGEA2, MAGEA11, MAGEA6, MAC		1208
MAGED1, MAGEA12, MAGEA2, MAGEA11, MAGEA6, MAGED4, MAGEA3, M		1206
MAGED1, MAGEA12, MAGEA2, MAGEA11, MAGEA6, MAGED4, MAGEA3, M		1095

Genes	List	Tota
S100A4, RPP38, LOR, RPL36A, PTGS2, SNRPD3, XRCC6, S100A9, F		908
S100A4, RPP38, LOR, RPL36A, PTGS2, SNRPD3, XRCC6, S100A9, F		908
S100A4, RPP38, LOR, RPL36A, PTGS2, SNRPD3, XRCC6, S100A9, F		908
RPP38, S100A4, RPL36A, LYAR, SNRPD3, UCHL1, S100A9, TCOF1,		908
S100A4, RPP38, LOR, RPL36A, SNRPD3, S100A9, XRCC6, HOXD12,		908

Genes	List	Tota
P4HB, TXNDC12, PDIA3, NXN, PRDX6, TXN, PRDX4, PDIA6, PDIA5,		1095
P4HB, PDIA3, TXN, PDIA6, PDIA5, PDIA4		1095
P4HB, PDIA3, TXN, PDIA6, PDIA4		1208
P4HB, TXNDC12, PDIA3, PRDX6, TXN, PRDX4, PDIA6, PDIA5, PDIA		1208
P4HB, TXNDC12, PDIA3, NXN, TXN, PDIA6, PDIA5, PDIA4		1095
P4HB, PDIA3, PDIA6, PDIA5, PDIA4		1206
P4HB, PDIA3, PDIA6, PDIA5, PDIA4		1206
P4HB, PDIA3, PDIA6, PDIA5, PDIA4		853
P4HB, PDIA3, PDIA6, PDIA5, PDIA4		853
P4HB, TPI1, PDIA3, PDIA6, PDIA5, RPIA, IDI2, PDIA4, SIGMAR1		853
P4HB, PDIA3, PDIA6, PDIA5, PDIA4		853
P4HB, TXNDC12, PDIA3, NXN, PRDX6, TXN, PRDX4, PDIA6, PDIA5,		924
P4HB, PDIA3, PDIA6, PDIA4		1095
P4HB, PDIA3, TXN, PDIA6		1206
P4HB, PDIA3, PDIA6, PDIA5		561
TXNL4B, P4HB, PDIA3, PRDX4, PDIA6, PDIA5, PDIA4, PRDX1, TXN		1095
P4HB, PDIA3, PDIA6		1206
P4HB, PDIA3, PDIA6		1206
P4HB, PDIA3, PDIA4		1095
P4HB, TXNDC12, PDIA3, PTGS2, P4HA2, PDIA6, SUMF2, IGF2, PDI		908
P4HB, PDIA3, TXN, PDIA6, PDIA5, PDIA4		1095
P4HB, TPI1, PDIA3, PDIA4		1208

Genes	List	Tota
SDHA, SDHB, SUCLG1, SDHC, IDH2, MDH2, MDH1		1208
SDHA, SDHB, UQCRH, SUCLG1, SDHC, IDH2, MDH2, UQCRB, MDH1		924
NDUFB3, NDUFA4, NDUFB5, SUCLG1, NDUFA6, NDUFB9, SDHA, SDHB,		924
SDHA, SDHB, SUCLG1, SDHC, IDH2, PDHA1, MDH2, MDH1		325
SDHA, SDHB, SUCLG1, SDHC, IDH2, MDH2, MDH1		924

SDHA, SDHB, SUCLG1, SDHC, IDH2, MDH2, MDH1	924
SDHA, SDHB, TDO2, SUCLG1, SDHC, IDH2, MDH2, MDH1	924
SDHA, SDHB, UGT1A8, SUCLG1, SDHC, IDH2, MDH2, MDH1	924
SDHA, SDHB, SUCLG1, SDHC, IDH2, MDH2, MDH1	924
NDUFB3, PRKAG3, NDUFA4, NDUFB5, NDUFB9, SUCLG1, NDUFA6, SDH	924
SDHA, SDHB, SDHC	853

Genes	List	Total
SMCP, TIMM50, UQCRCF1, MFF, NDUFS5, HTRA2, PARL, MRPL36, S	1208	
STOML2, TIMM50, UQCRCF1, MFF, NDUFS5, HTRA2, PARL, MRPL36,	908	
TIMM50, UQCRCF1, PARL, HTRA2, SLC25A3, MRPL36, MRPL37, PDHA	1208	
NDUFB3, NDUFA4, NDUFB5, SLC25A5, NDUFA4L2, NDUFB9, NDUFA6,	325	
TIMM50, UQCRCF1, PARL, HTRA2, SLC25A3, MRPL36, MRPL37, PDHA	1206	
MRPS17, MRPS15, MRPS12, KARS, MRPL11, MRPL16, MRPL36, MRPL3	908	
MRPS17, MRPS15, MRPS12, KARS, MRPL11, MRPL16, MRPL36, MRPL3	908	
NDUFB3, NDUFA4, NDUFB5, SUCLG1, NDUFA6, NDUFB9, SDHA, SDHB,	924	
NIT2, STOML2, MFF, HTRA2, MRPL36, MRPL37, PDHA1, MRPL33, TM	908	
S100A6, HTATIP2, LEMD2, STOML2, TIMM50, RANGAP1, UQCRCF1, M	908	
S100A6, HTATIP2, LEMD2, STOML2, TIMM50, RANGAP1, UQCRCF1, M	908	
NDUFB3, NDUFA4, NDUFB5, SLC25A5, NDUFB9, NDUFA6, TIMM50, UQ	1208	
NDUFB3, NDUFB5, SAMM50, NDUFB9, STOML2, TIMM50, UQCRCF1, ME	908	
NDUFB3, NDUFB5, SAMM50, NDUFB9, STOML2, TIMM50, UQCRCF1, ME	908	
NDUFB3, NDUFA4, NDUFB5, SAMM50, NDUFB9, NDUFA6, TOMM40, TIM	908	
NDUFB3, PRKAG3, NDUFA4, NDUFB5, NDUFB9, SUCLG1, NDUFA6, SDF	924	
SDHA, NDUFB3, NDUFA4, SDHB, NDUFS5, NDUFB5, UQCRH, NDUFB9,	1208	
NDUFB3, POLR2H, NDUFA4, POLR2F, NDUFB5, SLC25A5, NDUFA4L2,	325	
NDUFB3, NDUFB5, LMNB2, NDUFB9, LEMD2, STOML2, TIMM50, UQCRE	908	
SDHA, NDUFB3, NDUFA4, SDHB, NDUFS5, NDUFB5, UQCRH, NDUFB9,	924	
SDHA, NDUFB3, NDUFA4, NDUFS5, NDUFB5, UQCRH, NDUFB9, NDUFA6	908	
SDHA, NDUFB3, NDUFA4, NDUFS5, NDUFB5, UQCRH, NDUFB9, NDUFA6	908	
NDUFB3, NDUFB5, NDUFB9, STOML2, TIMM50, UQCRCF1, NDUFS5, P	908	
NDUFB3, NDUFA4, NDUFS5, NDUFB5, UQCRH, NDUFB9, NDUFA6, UQCF	1208	
NDUFB3, NDUFA4, NDUFS5, NDUFB5, UQCRH, NDUFB9, NDUFA6, NDUF	924	
NDUFB3, NDUFA4, NDUFS5, NDUFB5, UQCRH, NDUFB9, NDUFA6, NDUF	924	
NDUFA4, NDUFB3, NDUFB5, NDUFA4L2, NDUFA6, NDUFB9, UQCRCF1,	325	
NDUFB3, PRKAG3, NDUFB5, PPARD, NDUFB9, PGAM1, POMC, UQCRCF1	924	
NDUFB3, NDUFA4, NDUFS5, NDUFB5, TP53I3, NDUFB9, NDUFA6, NDU	853	
SDHA, NDUFB3, NDUFA4, SDHB, NDUFS5, NDUFB5, UQCRH, NDUFB9,	924	

Genes	List	Total
TUBA8, MSTO1, TUBB2A, TUBB6, TUBA4A, TUBA1B, TUBA1C, TUBB3	1095	
TUBA8, TUBB2A, TUBB6, TUBA4A, TUBA1B, TUBA1C, TUBB3	1095	
TUBA8, TUBB2A, TUBB6, TUBA4A, TUBA1B, TUBA1C, TUBB3	1095	
TUBA8, TUBB2A, TUBB6, TUBA4A, TUBA1B, TUBA1C, TUBB3	1095	
TUBA8, TUBB2A, TUBB6, TUBA4A, TUBA1B, TUBA1C, TUBB3	561	
TUBBP5, TUBA8, MSTO1, TUBB2A, RAC1, TUBB6, TUBA4A, TUBA1B,	924	

TUBA8, TUBA4A, TUBA1B, TUBA1C	1095
MSTO1, OOE, SAMM50, IPO13, TUBB2A, THEG, SRC, TUBBP5, PSMC	924

Genes	List	Tota
SLC16A13, SLC36A2, SLC6A10P, SLC15A1, SLC34A1, SLC6A16, SLC		853
SLC16A13, SLC6A10P, SLC15A1, SLC34A1, SLC6A16, SLC6A18, SLC		1208
SLC1A5, SLC6A9, SLC6A10P, SLC6A8, SLC1A6, SLC5A9, SLC6A16,		853
SLC36A2, SLC6A10P, SLC15A1, SLC6A16, SLC6A18, SLC10A3, SLC		853
SLC6A9, SLC6A10P, SLC6A8, SLC18A3, SLC6A16, SLC6A18		853
SLC6A9, SLC6A10P, SLC6A8, SLC6A16, SLC6A18		853
SLC6A9, SLC6A10P, SLC6A8, SLC6A16, SLC6A18		1095

Genes	List	Tota
MT1L, NOS1, MT1E, MT1G, MT1X, MT1F		853
MT1L, MT1E, MT4, MT1G, MT1X, MT1F		1206
MT1L, MT1E, MT4, MT1G, MT1X, MT1F		1206
MT1L, MT1E, MT4, MT1G, MT1X, MT1F		1095
MT1L, MT1E, MT4, MT1G, MT1X, MT1F		1208
MT1L, ZNF133, MFI2, MT1E, MT1G, MT1X, MT1F		1208
MT1L, MT1E, MT4, MT1G, MT1X, MT1F		1095
MT1L, MT1E, MT4, MT1G, MT1X, MT1F		1095
MT1L, MT1E, MT4, MT1G, MT1X, MT1F		561
STEAP3, TYRP1, TYR, MT1L, MT1E, MT4, MT1G, SOD3, MT1X, S10C		1208
MT1L, MT1E, MT1G, MT1X, MT1F		1208
MT1L, MT1E, MT1G, MT1X, MT1F		1208
MT1L, MT1E, MT1G, MT1X, MT1F		1206
MT1L, MT1E, MT1G, MT1X, MT1F		1206

Genes	List	Tota
WNT10A, WNT10B, WNT5B, WNT11, WNT6, WNT7A		514
WNT10A, WNT10B, WNT5B, WNT11, WNT6, WNT7A		1095
WNT10A, WNT10B, WNT5B, WNT11, WNT6, WNT7A		1095
WNT10A, WNT10B, WNT5B, WNT11, WNT6, WNT7A		1095
WNT10A, WNT10B, WNT5B, WNT11, WNT6, WNT7A		561
WNT10A, WNT10B, WNT5B, WNT11, WNT6, WNT7A		924

Genes	List	Tota
KRT25, PPARD, PTGS2, HOXC13, RELA, SNAIL1, SPINK5, KRT71, NS		924
KRT25, PPARD, PTGS2, HOXC13, RELA, SNAIL1, SPINK5, KRT71, NS		924
KRT25, PPARD, PTGS2, HOXC13, RELA, SNAIL1, SPINK5, KRT71, NS		924
KRT25, PPARD, PTGS2, HOXC13, RELA, SNAIL1, SPINK5, KRT71, NS		924
KRT25, PPARD, PTGS2, HOXC13, RELA, SNAIL1, SPINK5, KRT71, NS		924

Genes	List	Tota
TALDO1, PFKL, PGM1, PGD, PFKP, TKT, RPIA, TKTL1		325
TALDO1, PFKL, PGD, NUDT5, PGAM1, PFKP, TKTL1, HYAL4, TPI1,		924
TPI1, TALDO1, PFKL, PGM1, PGD, PGAM1, PFKP, PDHA1, RPIA, TF		924
TYRP1, TALDO1, RBP1, PGD, PNP, RDH12, TPI1, TP53I3, TYR, TI		924
TALDO1, PFKL, NUDT5, PGD, PGAM1, PFKP, TKTL1, TPI1, PGM1, F		924
TALDO1, PFKL, NUDT5, PGD, PGAM1, PFKP, TKTL1, TPI1, PGM1, F		924
TDO2, TPI1, TP53I3, TALDO1, PGD, RPIA, PNP, MDH2, MDH1		924
TDO2, TPI1, TP53I3, TALDO1, PGD, RPIA, PNP, MDH2, MDH1		924
TDO2, TPI1, TP53I3, TALDO1, PGD, RPIA, PNP, MDH2, MDH1		924
TPI1, TALDO1, PFKL, PGM1, PGD, PGAM1, PFKP, PDHA1, RPIA, TF		924
TDO2, TPI1, TP53I3, TALDO1, PGD, RPIA, PNP, MDH2, MDH1		924
PRKAG3, PPARD, TALDO1, PFKL, SERPINA12, SLC37A4, PGD, PGAM1		924
TALDO1, PFKL, NUDT5, PGD, PGAM1, PFKP, TKTL1, TPI1, PGM1, F		924
TPI1, TALDO1, PGD		1208
TPI1, TALDO1, PGD, RPIA		924
TPI1, TP53I3, TALDO1, PGD, RPIA		924
PRKAG3, PPARD, TALDO1, PFKL, SERPINA12, SLC37A4, PGD, PGAM1		924
TDO2, TPI1, TP53I3, TALDO1, PGD, RPIA, PNP, MDH2, MDH1		924
TALDO1, NUDT5, PGD, RPIA		924
TDO2, TPI1, TP53I3, TALDO1, PGD, RPIA, PNP, MDH2, MDH1		924
TPI1, PFKL, PGM1, PGAM1, PFKP, PDHA1, MDH2, MDH1		924
PRKAG3, PPARD, TALDO1, PFKL, SERPINA12, SLC37A4, PGD, NUDT5		924

Genes	List	Tota
RAET1E, RAET1G, ULBP2, RAET1L		1206
RAET1E, RAET1G, ULBP2, RAET1L		1206
RAET1E, ULBP2, RAET1L		561

Genes	List	Tota
RANBP1, RANGAP1, SNHG3, RCC1		94
NUP62, NUTF2, RANGAP1, SNHG3, RCC1		94
RANBP1, RANGAP1, SNHG3, RCC1		94

Genes	List	Tota
RPUSD4, PUS3, PUS1, RPUSD3, PGM1, PGAM1, LSS		853
RPUSD4, PUS3, PUS1, RPUSD3, NOP10		924
RPUSD4, PUS3, PUS1, RPUSD3		853

Genes	List	Tota
MSTO1, SAMM50, TOMM40, PI4KB, VDAC2, MFF, TOMM6, TOMM5, TOM		1208
MSTO1, SAMM50, TOMM40, PI4KB, VDAC2, MFF, TOMM6, TOMM5, TOM		908
MSTO1, SAMM50, TOMM40, PI4KB, VDAC2, SIGMAR1, MFF, TOMM6, T		908
MSTO1, SAMM50, TOMM40, PI4KB, VDAC2, SIGMAR1, MFF, TOMM6, T		908

Genes	List	Tota
UBE2G2, UBE2I, TMEM189, UBE2L3, UBE2C, UBE2S, UBE2Q1, UBE2F		514
UBE2G2, UBE2I, TMEM189, UBE2L3, UBE2C, UBE2S, UBE2Q1, UBE2F		1095
UBE2G2, UBE2I, TMEM189, UBE2L3, UBE2C, UBE2S, UBE2Q1, UBE2F		1095

Genes	List	Tota
TRIM16L, TRIM65, TRIM47, TRIM48, TRIM43, TRIM50, TRIM16, R		1095
TRIM55, TRIM65, TRIM47, TRIM48, TRIM43, TRIM29, TRIM31, TRI		514
TRIM55, TRIM65, TRIM47, TRIM48, TRIM43, TRIM29, TRIM31, TRI		1206
RNF17, RNF220, TRIM50, NHLRC1, TRIM15, TRIM10, TRAIP, RNF22		1206
TRIM16L, TRIM65, TRIM47, TRIM48, HNRNPUL2, TRIM43, TRIM50,		1206
TRIM16L, TRIM47, TRIM50, TRIM16, RFPL3, TRIM15, TRIM10, TRI		514
TRIM55, TRIM65, TRIM47, TRIM48, TRIM43, TRIM29, TRIM31, TRI		1095
TRIM16L, TRIM65, TRIM47, TRIM48, HNRNPUL2, TRIM43, TRIM50,		1095
TRIM43, TRIM50, TRIM15, TRIM10, TRIM1		561
TRIM16L, TRIM47, TRIM50, TRIM16, RFPL3, TRIM15, TRIM10, TRI		1095
TRIM16L, TRIM65, TRIM48, HNRNPUL2, TRIM43, TRIM50, TRIM16,		1095

Genes	List	Tota
HPCAL1, TNNC1, NCALD, VSNL1, NCS1, KCNIP3		1095
HPCAL1, LPCAT1, NCALD, VSNL1, NCS1, MYL12A, KCNIP3		98
S100A6, HPCAL1, S100A8, TNNC1, NCALD, S100A9, S100A11, NCS1		1095

Genes	List	Tota
LCN2, LCN15, ORM1, RBP1, LCN9, PAEP, ORM2		1095
LCN2, LCN15, ORM1, RBP1, LCN9, PAEP, ORM2		1095
LCN2, LCN15, ORM1, LCN9, PAEP, ORM2		1095

Genes	List	Tota
MRPL11, MRPL1, MRPL51, RPL30, MRPL15, RPL7, MRPL16, RPL39L,		908
MRPL11, MRPL1, MRPL51, MRPL16, MRPL36		908
MRPL11, MRPL1, MRPL51, MRPL16, MRPL36		908

Genes	List	Tota
PPIAL4C, PPIF, PPIH, PPIAL4G, PPIA		561
PPIAL4C, PPIF, PPIE, PPIH, PPIAL4G, PPIA		1206
PPIAL4C, PPIF, PPIE, PPIH, PPIAL4G, PPIA		1095

Genes	List	Tota
NXN, PRDX6, PRDX4, PRDX1		1095

PRDX6, PRDX4, PRDX1, SOD3	1208
MGST3, LPO, PTGS2, NXN, PRDX6, PRDX4, PRDX1, SOD3	853
PRDX6, PRDX4, PRDX1	1095
PRDX6, PRDX4, PRDX1	561

Genes	List	Tota
RPL35A, RRP1, NHP2L1, SNRPD3, LSM6, SNRPD1, NOP10, MRT04, F		924
RPP38, PUS3, PUS1, LSM6, VARS, KARS, RPL7, NPM3, RPL5, MARS		924
RPL35A, RRP1, NHP2L1, LSM6, NOP10, MRT04, RPS7, PA2G4, RPL7		924
RPL35A, PA2G4, RRP1, RPL7, LSM6, NPM3, RPL5, NOP56, PES1, T		924

Genes	List	Tota
STEAP3, TFR2, TTYH1, MFI2, TRPC7, SLC39A7, SLC30A3, SLC39A4		924
TTYH1, SLC30A3, SLC39A4, TRPM2, SLC39A2, SLC39A1		853
SLC30A3, SLC39A4, SLC39A2, SLC39A1		853

Pop Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
64	19113	8.4193874	1.0564891	1.0564891	7.132188281824524E-		
64	19113	8.4193874	1.0564891	1.0564891	7.132188281824524E-		
70	19113	7.92412932	2.9048763	1.4524381	1.9610353478856754E-		
70	19113	7.92412932	2.9048763	1.4524381	1.9610353478856754E-		
70	19113	7.92412932	2.9048763	1.4524381	1.9610353478856754E-		
71	19113	7.81252185	2.2314497	1.7438165	3.531667712729469E-		
73	19113	7.59848021	1.6341815	4.0854538	1.1032097244684905E-		
78	19235	7.14494184	4.3351841	4.3351841	1.1154005755248876E-		
75	19113	7.18454396	0.0112973	1.2022594	4.0581302635382673E-		
72	16659	6.97294522	2.6877733	2.6877733	3.1241013989147577E-		
72	16659	6.97294522	2.6877733	2.6877733	3.1241013989147577E-		
61	7396	6.91598721	1.1112727	1.1112727	2.967166883109699E-		
73	16659	6.66901854	4.9838673	2.4919336	5.792938880072461E-		
28	16659	10.3235814	4.4142467	1.4713785	5.129230373768223E-		
634	12983	2.30466601	0.0983214	1.0983214	1.872946242542639E-		
33	19113	9.12475502	4.4129098	4.0215164	1.6289192217300297E-		
144	19235	3.64902381	4.6896252	2.9379251	3.7794974927507496E-		
183	12782	2.84618817	4.8719992	2.4957395	2.406362427098685E-		
88	12782	3.83920701	1.2801902	2.5603935	4.1145016038690585E-		
187	12782	2.78530701	1.3475460	2.2459227	4.330983063294269E-		
33	16659	5.53225400	0.0066585	8.3474932	0.0077650275190466E-		

Pop Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
199	13528	4.41427911	1.4094234	1.4094234	9.118733031280933E-		
184	13528	4.45586292	2.7654219	1.3827109	1.7891815684033596E-		
40	19235	9.15573266	6.3282712	2.1094237	1.6653345369377348E-		
43	13528	8.17154939	9.1826546	3.0608848	5.995204332975845E-		
66	13528	6.43303169	9.1826546	2.2959412	5.995204332975845E-		
72	13528	6.10028861	1.8365309	3.6726177	1.1879386363489175E-		
25	16659	10.3453151	1.7783108	4.4457770	2.0670132272471164E-		
137	13528	3.74032296	6.6159493	1.1026582	4.280408250068035E-		
227	13528	2.57985772	0.0179439	2.2423610	1.3057067272947975E-		
22	12782	7.03854623	3.9920361	4.4363828	0.0012832710851506E-		

Pop Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
279	19235	3.42430396	6.3282712	3.1641356	1.6653345369377348E-		
515	12782	2.29606943	3.5660363	3.5660363	1.1461054327810416E-		
188	19235	3.30317826	6.2474653	1.5618663	1.6074118702746887E-		
168	12983	3.26151396	7.1306853	3.3565348	1.1449579728761705E-		
215	12782	2.68446886	6.3625535	3.1812818	2.044903516518204E-		
48	12782	4.98563694	4.1455379	5.9223023	1.3323847221080598E-		
48	12782	4.98563694	4.1455379	5.9223023	1.3323847221080598E-		

331	13528	2.0788898	0.0080812	4.5067803	0.0052495	0.0545404	13.5067803
128	12782	2.8594094	0.0013022	1.3030375	0.0041880	0.1698975	6.0041880
63	12782	3.1282427	0.1610234	0.0109132	0.5626932	4822497	69.5626932
18	12782	5.4744248	0.3867037	0.0241489	1.5590458	7914019	73.5590458
18	12782	5.4744248	0.3867037	0.0241489	1.5590458	7914019	73.5590458

Pop Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
515	12782	2.2960694	3.5660363	3.5660363	1.1461054	3278104	16.1461054
547	13528	1.6594569	0.2235317	0.0114341	0.1635525	8693930	84.1635525
718	12983	1.4838828	0.5242262	0.0600241	1.2589241	6443199	6.2589241

Pop Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
47	5085	6.6579378	2.5325759	2.5325759	1.8725299	0890840	46.8725299
56	19235	5.6867904	3.2369083	4.6241553	8.3282505	3365127	1E+08.3282505
61	12782	4.6154401	9.2161509	2.3040457	2.9620443	1982083	35.9620443
65	13528	4.5048285	9.8251955	1.4036584	6.3570467	7676152	1E+06.3570467
65	13528	4.5048285	9.8251955	1.4036584	6.3570467	7676152	1E+06.3570467
67	13528	4.3703560	1.6900602	2.1127314	1.0935323	8897380	58.0935323
67	13528	4.3703560	1.6900602	2.1127314	1.0935323	8897380	58.0935323
19	16659	8.8079307	1.0883401	1.5548441	1.2650872	8359731	04.2650872
68	13528	4.3060860	2.1971484	2.1973657	1.4216733	3316141	37.4216733
20	19235	8.7576572	5.3812873	6.7267675	1.3845890	1655091	9E+01.3845890
70	13528	4.1830550	3.6522449	3.3207740	2.3633699	7228026	04.3633699
20	12983	8.3712192	1.3002960	4.3345079	2.2178813	6278711	08.2217881
20	12983	8.3712192	1.3002960	4.3345079	2.2178813	6278711	08.2217881
71	13528	4.1241387	4.6715672	3.8938064	3.0231271	5294572	6E+01.0231271
17	19235	9.3664783	1.2819903	1.4245148	3.2986420	7249119	8E+01.2986420
73	13528	4.0111486	7.5290587	5.7935972	4.8729974	1369628	95.8729974
20	12782	7.7424008	1.3006637	1.6259221	4.1805401	4394986	24.1805401
74	13528	3.9569439	9.4896853	6.7813349	6.1425632	1129769	1E+06.1425632
84	13528	3.6601731	0.0017546	1.1707213	0.0011362	1560307	03.0011362
78	13528	3.7540237	0.0022901	1.4328936	0.0014833	8826297	94.0014833
81	13528	3.6149858	0.0042453	2.5022944	0.0027525	0879617	77.0027525
100	13528	3.0745454	0.0304271	0.0016249	0.0199895	9040232	50.0199895
14	16659	8.6935420	0.0165843	0.0013926	0.0194363	3716312	54.0194363
102	13528	3.0142602	0.0412051	0.0021016	0.0272201	3118074	96.0272201
102	13528	3.0142602	0.0412051	0.0021016	0.0272201	3118074	96.0272201
12	16659	8.8746575	0.0709609	0.0045897	0.0855167	1793384	23.0855167
370	13528	1.8201942	0.2590433	0.0129507	0.1937860	5191621	15.0129507
119	13528	2.5836516	0.3376822	0.0170205	0.2662085	3815157	99.2662085
19	19235	5.8663733	0.3680589	0.0181908	1.1739123	7255323	19.0181908
8	16659	9.5085616	0.7735279	0.0600048	1.7114138	2317550	05.0600048
187	13528	1.9573118	0.9964795	0.1769996	3.5889269	8950250	55.1769996
565	13528	1.4770256	0.9997230	0.2086787	5.1619545	2701461	11.2086787
187	13528	1.8790193	0.9999931	0.2628109	7.4051053	5479811	3.4051053
180	13528	1.8707551	0.9999997	0.3006622	9.4702176	4475378	6.4702176

776	13528	1.3584147	0.9999999	0.3296675	10.99268269679714
334	13528	1.5780387	0.9999999	0.3436152	12.49451829394359
277	13528	1.5856345	1.0	0.4725574	22.312037173222976
242	13528	1.5729669	1.0	0.6188675	36.195179218660165
734	13528	1.2566262	1.0	0.7726653	56.560688977961405
233	13528	1.5080541	1.0	0.7773417	57.89239431192434
295	13528	1.4392545	1.0	0.7749229	58.036441322283515

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
27	16659	7.8885844	4.7193008	9.4386196	5.485436005425726E			
28	16659	7.6068493	8.2802848	1.3800522	9.624529861973485E			
21	19113	9.0561478	3.0821810	4.4031739	2.0807627842955867E			
19	7396	8.3264846	1.0049861	5.0249433	2.6833882160737232E			
18	19113	8.8045881	0.0011608	1.4518062	7.841266959407456E			
60	19235	3.4499862	0.1561180	0.0076858	0.4357788753608149E			
182	19113	2.0028019	0.9987274	0.3407611	4.4008139766111505			
182	19113	1.9157235	0.9999993	0.5091911	9.161913419398537			
236	16659	1.6116206	0.9999999	0.5045342	30.740998468395876			
130	16659	1.8724552	0.9999999	0.5194836	32.42016447430917			
215	16659	1.6275119	0.9999999	0.5312858	35.05180197751066			
217	16659	1.6125118	1.0	0.5501545	37.72144146870418			

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
15	1437	10.1914896	6.8756174	6.8756174	5.8290429538754296E			
126	5085	3.1043956	1.4300931	7.1507214	0.0010574490856951			
17	9079	9.3512245	3.5424579	3.5424579	0.0019535348669830E			
209	19235	2.5141599	0.0014332	1.3038285	0.0036902585672904E			
17	16659	8.0543110	0.0067982	7.5765862	0.0079285891066649E			
19	16659	7.2064888	0.0186611	0.0014479	0.0218930671468386E			
24	12782	5.8654552	0.0094843	7.9382265	0.0306232089245739E			
260	19235	2.1434825	0.0222044	0.0014024	0.0577570159406848E			
284	13528	2.0105176	0.1273205	0.0064641	0.0880718903715327E			
547	13528	1.6594569	0.2235317	0.0114341	0.1635525869393084E			
120	19235	2.6538355	0.0916979	0.0045694	0.2471515231284193E			
321	13528	1.8243853	0.5787398	0.0339891	0.557758733613456E			
132	12782	2.3461820	0.1561997	0.0112587	0.5443695808756255E			
153	13528	2.2008884	0.8531137	0.0711174	1.2333080295425902E			
153	13528	2.2008884	0.8531137	0.0711174	1.2333080295425902E			
153	13528	2.2008884	0.8531137	0.0711174	1.2333080295425902E			
370	13528	1.6223470	0.9991072	0.1916522	4.4409527212318505E			
540	19235	1.5038401	0.8871703	0.0659110	5.459090919896148E			
28	13528	3.6601731	0.9999999	0.4023501	16.737265714412086E			

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
22	16659	6.9153175	0.0070864	7.1091500	0.0082658328457441E			

16	9079	8.83171200	0.00300500	0.00100270	0.0165927581457836
20	19113	7.13171640	0.03994240	0.00451880	0.0275139916879552
16	16659	7.60684930	0.04839150	0.00330130	0.0576371829937194
18	16659	6.76164380	0.11556650	0.00679940	0.1426425684272869
8	7396	8.23975040	0.62174800	0.27679672	0.56241831635724
126	19235	2.14834300	0.95699820	0.08152537	0.776642797587541

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
13		16659	9.36227600	0.00882608	0.05603100	0.0103038352688433		
92		12983	3.30878230	0.00594140	0.00148860	0.0101632028089992		
15		9079	9.42049280	0.00177768	0.89214340	0.0098096177281736		
153		12983	2.58647290	0.01803720	0.00363370	0.0310397703505826		
15		16659	8.11397260	0.02914410	0.00211040	0.0343729223170052		
80		19235	3.38364030	0.01755280	0.00126410	0.0455525158395642		
145		12983	2.51923830	0.06034220	0.01031960	0.1060973565218614		
107		19235	2.82745090	0.06221840	0.00337520	0.1651421491924876		
8		16659	9.50856160	0.77352790	0.06000481	0.7114138231755005		
45		19113	3.52183520	0.98917610	0.27623313	0.0092258162210284		
10		19113	7.92412930	0.99831690	0.34675994	0.220229552961463		
270		12983	1.74752720	0.94738450	0.15091584	0.89841438077635		
40		9079	3.53268480	0.77935640	0.22265247	0.994655473414025		
33		7396	3.19602440	0.99663960	0.612981414	0.107922505142835		
40		16659	3.04273970	0.99999990	0.424835121	0.16935748088301		
5		19113	9.50895521	1.0	0.946148846	0.8009336623934		
5		19113	9.50895521	1.0	0.946148846	0.8009336623934		

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
116		9079	3.04541790	0.00556510	0.00139420	0.0307656107350728		
136		19235	2.69286250	0.02156740	0.00145250	0.0560823819511391		
106		19113	2.84072560	0.24222700	0.02735600	0.1870738110201886		
104		16659	2.77942570	0.17561050	0.01011230	0.2242099645241801		
105		16659	2.75295490	0.19669310	0.01089110	0.2542498291643214		
154		12983	2.37201010	0.14673570	0.02241440	0.2702834436653978		
116		16659	2.62305140	0.23680690	0.01278630	0.3136224377767949		
178		12983	2.13769640	0.42238560	0.05916090	0.9317297826890392		
196		19113	2.10232000	0.80231330	0.12636211	0.0883935152434798		
180		12983	2.11394420	0.47564260	0.05700021	0.0950422646154645		
375		12983	1.70468460	0.54985800	0.05955241	0.3521444153651418		
574		12983	1.40536780	0.99994980	0.375878915	0.535987646977157		
484		19235	1.44754660	0.99966940	0.166528718	0.634159959722652		
549		12983	1.33074520	0.99999990	0.667292543	0.05521292394378		

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
1689		19235	1.44240430	0.00153991	0.28419750	0.0039651138010632		
3250		19235	1.11216120	0.99999990	0.368520648	0.43531324779773		

2010 12782 1.13457160.99999990.389901549.48476342343907

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
38		19235	4.1902666	0.2285041	0.0112159	0.6652500	2285032	77
32		19113	3.9620646	0.9998083	0.3955999	5.6148080	7446211	8
35		16659	3.4774168	0.9999429	0.2498013	10.7372434	8199134	2

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
1779		12782	1.2898066	0.1384611	0.0105889	0.4778470	1508792	88
1856		12782	1.2742195	0.1843194	0.0119127	0.6526483	4731918	46
1820		12782	1.2762199	0.1964538	0.0120776	0.7004936	3224681	25
698		12782	1.2705685	0.9999999	0.3574640	42.5605441	0693797	
1450		12782	1.1650007	0.9999999	0.3897703	48.6612159	6624928	

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
36		16659	4.6486301	0.1016046	0.0062828	0.1244612	0109580	46
10		16659	9.1282191	0.2794869	0.0147891	0.3802799	1874041	15
8		19235	9.9518832	0.3946857	0.0191227	1.2833108	0191521	62
42		19235	3.7911936	0.4322661	0.0207484	1.4459704	2663190	4
26		16659	4.6811380	0.7976032	0.0619021	1.8397311	3222684	06
9		19113	8.8045881	0.9822437	0.2666103	2.6845805	3975760	84
9		19113	8.8045881	0.9822437	0.2666103	2.6845805	3975760	84
9		12983	8.4557769	0.8039438	0.1098652	2.7407117	4435335	24
9		12983	8.4557769	0.8039438	0.1098652	2.7407117	4435335	24
38		12983	3.6048312	0.9225758	0.1477740	4.2697789	4490271	3
10		12983	7.6101992	0.9239683	0.1406380	4.2994066	0186809	4
63		13528	2.7887033	0.9998812	0.2220344	5.6801391	8917784	6
6		16659	10.1424650	0.9990099	0.2059364	7.7259929	0885603	9
7		19113	9.0561478	0.9999999	0.5791709	12.0627734	8375617	3
7		7396	7.5334861	0.9986255	0.5612011	16.1339604	4419167	73
101		16659	2.1088295	0.9999999	0.4271074	21.8113517	8844741	8
4		19113	11.8861941	1.0		0.8745871	32.4593130	663313
4		19113	11.8861941	1.0		0.8745871	32.4593130	663313
4		16659	11.4102730	0.9999999	0.5147476	32.6334221	2726145	4
80		12782	2.1115638	0.9999868	0.2815331	30.3230451	1153677	4
27		16659	3.3808219	1.0		0.5543132	38.6424468	5968870
12		19235	5.3076710	0.9999999	0.3212318	41.0438714	0347407	

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
21		19235	5.3076710	0.5613514	0.0270947	2.0978990	9599016	33
35		13528	3.7647495	0.9964992	0.1717931	3.5924255	8196858	35
97		13528	2.4149596	0.9982207	0.1847371	4.0136591	3749600	6
31		5085	4.0377171	0.3660526	0.0871264	3.3138526	5431138	9
23		13528	4.4558629	0.9999597	0.2392809	6.3372261	0588474	1

23	13528	4.4558629	0.9999597	0.2392809	6.3372261	0.5884741
31	13528	3.7782432	0.9999898	0.2610531	7.1679203	0.1284355
31	13528	3.7782432	0.9999898	0.2610531	7.1679203	0.1284355
26	13528	3.9417249	0.9999999	0.3325172	11.7977790	0.933246
144	13528	1.9317580	0.9999999	0.3747944	15.1334965	0.1520823
4	12983	11.415298	0.9999999	0.5833666	31.1559470	0.8073248

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
832	19235	1.7033030	5.2991139	5.3003780	0.0013637	623799356		
595	12782	1.6324695	0.0248283	0.0019321	0.0807718	441810267		
476	19235	1.7394888	0.0726079	0.0037618	0.1937545	502993520		
128	5085	2.4447115	0.0655150	0.0223334	0.4997479	321285913		
467	19113	1.6628793	0.7857589	0.1306934	1.0346805	318848906		
227	12782	1.9224223	0.2654975	0.0161089	0.9868034	04262504		
227	12782	1.9224223	0.2654975	0.0161089	0.9868034	04262504		
97	13528	2.4149596	0.9982207	0.1847371	4.0136591	37496006		
1087	12782	1.3209415	0.6902918	0.0518839	3.6970840	84079283		
620	12782	1.4304142	0.8005659	0.0676982	5.0498071	84316501		
622	12782	1.4258148	0.8240726	0.0698445	5.4317526	18908126		
193	19235	1.8975611	0.9391913	0.0790537	6.9508068	11512111		
394	12782	1.5363324	0.9029399	0.0890770	7.2222306	58734108		
419	12782	1.5118595	0.9173703	0.0914446	7.7009546	47323632		
125	12782	2.0271013	0.9563686	0.1095240	9.5759978	65393926		
144	13528	1.9317580	0.9999999	0.3747944	15.1334965	0.1520823		
100	19235	2.2292218	0.9959994	0.1289299	13.2429098	54553153		
180	5085	1.8253846	0.8057267	0.2389692	11.4095622	0.3436252		
329	12782	1.5403505	0.9906725	0.1488780	13.9503674	27380606		
64	13528	2.5163690	0.9999999	0.4172269	17.7685439	15756275		
64	12782	2.4195002	0.9980552	0.1878637	18.1788898	09116782		
75	12782	2.2523348	0.9992507	0.2013941	20.6490281	04697244		
306	12782	1.4721142	0.9999972	0.2990966	33.7138611	166654524		
71	19235	2.2426779	0.9999999	0.3071297	38.7922113	9416488		
56	13528	2.3529684	1.0	0.7132640	47.1907470	1695681		
56	13528	2.3529684	1.0	0.7132640	47.1907470	1695681		
130	5085	1.8053254	0.9975614	0.4875139	35.9069619	7099196		
313	13528	1.4500366	1.0	0.7279907	49.0260724	6895899		
49	12983	2.4849630	0.9999999	0.6734699	46.7379099	85824345		
114	13528	1.7979797	1.0	0.7764283	57.3819532	4819595		

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
24	16659	5.0712328	0.6106404	0.0401813	1.0903894	329109765		
22	16659	4.8407222	0.9656207	0.1215770	3.8416924	442175038		
23	16659	4.6302561	0.9865822	0.1475777	4.8875634	64185285		
24	16659	4.4373287	0.9956413	0.1764478	6.1225523	383406132		
22	7396	4.1947820	0.9274771	0.4810581	6.7660736	30719616		
49	13528	2.9878964	0.9999996	0.2959841	9.0959733	9129009		

9	16659	6.7616438	0.9999999	0.4590869	25.3861229	447771
162	13528	1.7171182	1.0	0.6490770	39.4293625	2193522

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
137		12983	2.3330537	0.4260778	0.0540127	0.9425643	988136501	
111		19235	2.4386596	0.5778386	0.0274349	2.1943537	85034231	
52		12983	3.2196997	0.8050664	0.1032753	2.7502364	909707255	
95		12983	2.4032208	0.9594084	0.1551886	5.3183197	239070275	
24		12983	3.8050996	0.9999999	0.4996376	24.6806639	03708332	
20		12983	3.8050996	0.9999999	0.6740974	45.7683741	8381092	
20		16659	3.8034246	1.0	0.6306942	47.7113367	4353633	

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
10		12983	7.6101992	0.9239683	0.1406380	4.2994066	01868094	
11		19113	7.2037539	0.9999284	0.4115511	6.2403178	9053473	
11		19113	7.2037539	0.9999284	0.4115511	6.2403178	9053473	
11		16659	6.9153175	0.9974688	0.1863093	6.7137151	97839187	
12		19235	6.6345888	0.9452190	0.0796334	7.2003869	39347014	
19		19235	5.0283199	0.9530250	0.0814402	7.5667081	61112734	
12		16659	6.3390410	0.9997994	0.2401660	9.4225716	56974899	
12		16659	6.3390410	0.9997994	0.2401660	9.4225716	56974899	
11		7396	5.9925457	0.9781648	0.5345947	9.7069248	10907115	
57		19235	2.7935110	0.9928570	0.1190094	11.9392448	7373973	
8		19235	7.9615066	0.9980320	0.1409854	14.8121247	81671166	
8		19235	7.9615066	0.9980320	0.1409854	14.8121247	81671166	
10		19113	6.3393034	1.0	0.8790076	31.9525487	0120091	
10		19113	6.3393034	1.0	0.8790076	31.9525487	0120091	

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
19		9079	5.5779234	0.5465689	0.1463059	4.2671403	77207612	
19		16659	4.8043258	0.9999024	0.2506952	10.1786751	0610998	
19		16659	4.8043258	0.9999024	0.2506952	10.1786751	0610998	
19		16659	4.8043258	0.9999024	0.2506952	10.1786751	0610998	
19		7396	4.1632423	0.9983370	0.5991484	15.7061459	00017265	
21		13528	4.1830550	0.9999999	0.4333904	19.1984479	9279672	

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
42		13528	3.1372912	0.9999999	0.3272164	11.3538304	27203338	
42		13528	3.1372912	0.9999999	0.3272164	11.3538304	27203338	
42		13528	3.1372912	0.9999999	0.3272164	11.3538304	27203338	
43		13528	3.0643310	0.9999999	0.3502930	13.0207459	88555948	
43		13528	3.0643310	0.9999999	0.3502930	13.0207459	88555948	

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
25		5085	5.0067692	0.1094301	0.0285577	0.8532316613421242		
109		13528	2.4177290	0.9516186	0.1061094	1.940407325415483		
58		13528	3.0291088	0.9895115	0.1502111	2.9055688096447763		
79		13528	2.5945531	0.9990159	0.1945616	4.380727085395952		
71		13528	2.6806902	0.9996493	0.2086301	5.016950944962472		
85		13528	2.4114081	0.9999983	0.2831162	8.253163489029802		
40		13528	3.2941558	0.9999988	0.2836680	8.469216559992654		
40		13528	3.2941558	0.9999988	0.2836680	8.469216559992654		
41		13528	3.2138105	0.9999998	0.3049693	9.838140120427353		
69		13528	2.5462074	0.9999999	0.3310000	11.275277148234853		
42		13528	3.1372912	0.9999999	0.3272164	11.353830427203338		
153		13528	1.9138160	0.9999999	0.3553328	13.485662707981238		
81		13528	2.3497407	0.9999999	0.3652433	14.179524506029706		
3		19235	15.9230130	0.9984719	0.1430496	15.36487883192298		
9		13528	6.5069745	1.0	0.5772872	29.599412377263036		
16		13528	4.5752164	1.0	0.5854018	30.550163467826497		
192		13528	1.6775793	1.0	0.6049452	32.33273826437121		
52		13528	2.5339660	1.0	0.6150913	34.702579277030864		
11		13528	5.3238882	1.0	0.7114698	46.5943586866337		
56		13528	2.3529684	1.0	0.7132640	47.19074701695681		
47		13528	2.4920327	1.0	0.7356609	50.632467029135974		
222		13528	1.5168285	1.0	0.7832842	59.755573466592594		

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
6		19113	10.5655050	0.9999887	0.4511156	7.4056980838541175		
6		19113	10.5655050	0.9999887	0.4511156	7.4056980838541175		
5		7396	7.9101604	0.9999999	0.9359107	51.981974459884796		

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
6		1437	10.1914890	0.4696535	0.2717511	5.234847994548131		
12		1437	6.3696808	0.5319486	0.2235779	6.233419428538845		
12		1437	5.0957446	0.9951922	0.6561349	36.39678343414137		

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
26		12983	4.0977996	0.9951848	0.2341737	8.699043907444015		
14		13528	5.2288188	0.9999999	0.4419694	19.962363359096468		
12		12983	5.0734661	0.9999999	0.6638892	46.86130388103569		

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
70		19235	2.9571310	0.5152847	0.0246629	1.846028113102871		
90		12782	2.0333578	0.9999844	0.2850605	29.94531792546844		
104		12782	1.8949932	0.9999994	0.3226012	37.07166958647179		
108		12782	1.8248082	0.9999999	0.3687498	45.45925421584089		

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
	41	9079	3.4465217	0.8239052	0.1951437	9.1316471	74806501	
	41	16659	2.9685265	0.9999999	0.4503813	23.7628289	3385383	
	48	16659	2.5356164	1.0		0.6186927	45.4013302	18025315

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
	62	16659	2.6992045	0.9999355	0.2535456	10.6102617	2668289	
	72	9079	2.6985786	0.8010561	0.2060033	8.5183367	23152508	
	55	19113	2.8815015	0.9999999	0.5862866	11.7610343	355078227	
	210	19113	1.7357616	0.9999999	0.7720047	21.3006690	21951357	
	82	19113	2.3192573	0.9999999	0.7643310	21.6456965	34036286	
	48	9079	2.9439040	0.9829909	0.3346224	20.1187359	99609918	
	72	16659	2.3243150	0.9999999	0.4729308	26.8489160	38565164	
	87	16659	2.0984411	1.0		0.5373696	36.1083046	57957014
	17	7396	3.8775296	0.9999999	0.8850835	40.5427814	4463634	
	48	16659	2.5356164	1.0		0.6186927	45.4013302	18025315
	84	16659	1.9922700	1.0		0.7006095	55.6490793	10084424

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
	22	16659	4.1491905	0.9999999	0.3903066	18.7016617	5589797	
	43	1950	3.2392026	0.3008021	0.3008021	12.7303600	58401558	
	130	16659	1.8724552	0.9999999	0.5194836	32.4201644	7430917	

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
	32	16659	3.3279965	0.9999999	0.4449050	23.9415728	55752447	
	33	16659	3.2271481	0.9999999	0.4694874	27.1547218	59104725	
	25	16659	3.6512876	0.9999999	0.5020932	29.9976259	67836584	

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
	67	12782	2.5212703	0.9566907	0.1060639	9.5975330	62227603	
	18	12782	3.9103034	0.9999998	0.3349895	39.2397230	7928963	
	18	12782	3.9103034	0.9999998	0.3349895	39.2397230	7928963	

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
	7	7396	7.5334861	0.9986255	0.5612011	16.1339604	41916773	
	18	19113	4.4022940	1.0		0.8854507	34.5703200	867837
	21	16659	3.6223091	1.0		0.6840275	53.3876212	75348216

Pop	Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
	7	16659	8.6935420	0.9999902	0.2807927	12.5488317	62072531	

9	19235	7.0768947	0.9998683	0.1800984	20.539231531199498
47	12983	2.5907061	0.9999999	0.6461841	40.18378116939192
5	16659	9.1282191	1.0	0.6293470	46.979116583938875
5	7396	7.9101604	0.9999999	0.9359107	51.981974459884796

Pop Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
180	13528	1.7894179	0.9999999	0.4174751	18.068187878528363		
230	13528	1.5913796	1.0	0.6225945	36.0849079804306		
122	13528	1.8000851	1.0	0.7350679	50.1471524173341		
92	13528	1.9096555	1.0	0.7759328	58.54927906090887		

Pop Hits	Pop	Total	Fold	Enri	Bonferron	Benjamini	FDR
71	13528	2.2682763	1.0	0.6001455	32.39037085425197		
27	12983	3.3823107	0.9999999	0.6321775	36.907860345151086		
12	12983	5.0734661	0.9999999	0.6638892	46.86130388103569		

Log P-value

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