

Table S1. Statistics of the *NF-Y* genes in each *NF-Y* subfamily in *Arabidopsis* and three *Brassica* species

Type	Family	<i>Arabidopsis thaliana</i>	<i>Brassica oleracea</i>	<i>Brassica rapa</i>	<i>Brassica napus</i>
NF-YA	NF-YA1	1	3	3	6
	NF-YA2	1	3	2	4
	NF-YA3	1	7	2	7
	NF-YA4	1	1	1	2
	NF-YA5	1	2	3	6
	NF-YA6	1	2	1	3
	NF-YA7	1	1	1	2
	NF-YA8	1	1	1	1
	NF-YA9	1	1	3	5
	NF-YA10	1	1	1	2
NF-YB	NF-YB1	1	2	1	4
	NF-YB2	1	2	2	5
	NF-YB3	1	3	3	5
	NF-YB4	1	1	1	1
	NF-YB5	1	2	2	3
	NF-YB6	1	2	2	4
	NF-YB7	1	2	2	4
	NF-YB8	1	2	2	5
	NF-YB9	1	3	3	4
	NF-YB10	1	1	1	2
	NF-YB11	1	1	1	3
	NF-YB12	1	4	2	4
	NF-YB13	1	2	2	2
NF-YC	NF-YC1	1	/	/	/
	NF-YC2	1	1	1	/
	NF-YC3	1	/	/	/
	NF-YC4	1	3	2	5
	NF-YC5	1	/	/	/
	NF-YC6	1	/	/	/
	NF-YC7	1	/	/	/
	NF-YC8	1	/	/	/
	NF-YC9	1	2	3	6
	NF-YC10	1	2	2	4
	NF-YC11	1	3	3	7
	NF-YC12	1	1	/	/
	NF-YC13	1	1	1	2
Total	36	36	62	54	108

Table S2. Copy number variations of the *NF-Y* family in higher plants

Item	NF-YA	NF-YB	NF-YC	Total	Reference
<i>Arabidopsis thaliana</i>	10	13	13	36	TAIR database
<i>Brassica napus</i>	38	46	24	108	BLAST search in genome database
<i>Brassica oleracea</i>	22	27	13	62	BLAST search in genome database
<i>Brassica rapa</i>	18	24	12	54	BLAST search in genome database
<i>Camellia sinensis</i>	10	16	13	39	Planta. 2019, 250(5): 1671-1686
<i>Glycine max</i>	21	32	15	68	Mol Genetics Genomics. 2015, 290(3): 1095-1115
<i>Juglans regia</i>	17	9	7	33	BMC Plant Biology. 2018, 18(1): 255
<i>Malus Domestica</i>	11	22	10	43	Plants-Basel. 2020, 10(1): 16
<i>Manihot esculenta</i>	15	21	15	51	Annals of Botany. 2020, 124(7): 1185-1197
<i>Petunia hybrida</i>	10	13	4	27	Plants-Basel. 2020, 9(3): 336
<i>Populus trichocarpa</i>	13	20	19	52	Physiologia plantarum. 2021, 171(3): 309-327
<i>Prunus persica</i>	6	12	6	24	BMC Genomics. 2019, 20(1): 612
<i>Sorghum bicolor</i>	8	11	14	33	Physiol Mol Biol Plants. 2016, 22(1): 33-49
<i>Triticum aestivum</i>	10	11	14	35	Plant Mol Biol. 2007, 65(1-2): 77-92

Table S3. Characteristics of the *NF-Y* family members in *B. napus* and subcellular localization prediction

Gene name	Gene ID	Gene position			Gene length (bp)	Protein length (aa)	MW (Da)	PI	GRAVY	Intron number	Subcellular location
		Chrom.	Start	End							
<i>BnaA02.NF-YA1</i>	BnaA02g01270D	A2	566388	567760	1004	236	26098.88	6.67	-1.060	4	nucl
<i>BnaA03.NF-YA1</i>	BnaA03g04040D	A3	1883229	1884845	799	205	22509.00	8.58	-0.903	5	nucl
<i>BnaA10.NF-YA1</i>	BnaA10g29990D	A10_R	2015895	2018378	1655	284	30815.79	6.35	-1.018	4	nucl
<i>BnaC02.NF-YA1</i>	BnaC02g04360D	C2	2225135	2226235	660	219	24700.16	9.63	-0.629	5	nucl
<i>BnaC03.NF-YA1</i>	BnaC03g05640D	C3	2717638	2719734	1522	259	28567.61	8.52	-0.983	4	nucl
<i>BnaC09.NF-YA1</i>	BnaC09g44190D	C9	45143706	45146146	1645	285	31064.05	6.11	-1.019	4	nucl
<i>BnaA03.NF-YA2</i>	BnaA03g29140D	A3	14170614	14171911	846	281	30995.03	9.75	-0.625	3	nucl
<i>BnaAnn.NF-YA2</i>	BnaAnng02740D	An_R	2235220	2236987	1105	274	29736.43	9.39	-0.511	3	nucl
<i>BnaC05.NF-YA2a</i>	BnaC05g46110D	C5	41750761	41751533	540	179	20294.87	9.51	-0.777	3	nucl
<i>BnaC05.NF-YA2b</i>	BnaC05g19190D	C5	12704323	12706125	1351	281	30995.03	9.75	-0.625	3	nucl
<i>BnaA02.NF-YA3</i>	BnaA02g16180D	A2	9628040	9630116	1742	291	32281.88	8.89	-0.842	3	nucl
<i>BnaA07.NF-YA3</i>	BnaA07g30460D	A7	21566941	21569044	1707	322	35644.00	9.36	-0.707	4	nucl
<i>BnaC02.NF-YA3</i>	BnaC02g21570D	C2	18560619	18562639	1686	319	35316.44	9.03	-0.742	3	nucl
<i>BnaC04.NF-YA3</i>	BnaC04g27090D	C4	28335962	28336402	441	146	16422.19	8.58	0.027	0	nucl
<i>BnaC06.NF-YA3a</i>	BnaC06g33980D	C6	33618683	33620678	1032	343	38150.04	9.37	-0.663	5	nucl
<i>BnaC06.NF-YA3b</i>	BnaC06g33950D	C6	33612111	33612907	723	240	27265.27	9.72	0.023	1	chlo
<i>BnaCnn.NF-YA3</i>	BnaCnng68450D	Cn_R	68066532	68068714	1372	405	46094.97	9.73	-0.788	5	nucl
<i>BnaA05.NF-YA4</i>	BnaA05g09110D	A5	5018220	5020045	1152	197	22197.77	8.72	-1.024	4	nucl
<i>BnaC04.NF-YA4</i>	BnaC04g10470D	C4	8048154	8050217	1404	196	22080.65	8.93	-1.019	4	nucl
<i>BnaA06.NF-YA5</i>	BnaA06g01280D	A6	817024	818933	1655	285	31425.95	9.58	-0.769	3	nucl
<i>BnaA08.NF-YA5</i>	BnaA08g00840D	A8	610760	612272	1236	228	25409.68	9.45	-0.613	3	nucl
<i>BnaAnn.NF-YA5</i>	BnaAnng31560D	An_R	36113417	36115159	1470	231	25671.99	9.90	-0.670	3	nucl

<i>BnaC06.NF-YA5a</i>	BnaC06g10580D	C6	12712609	12714019	1157	235	25964.24	9.81	-0.640	3	nucl
<i>BnaC06.NF-YA5b</i>	BnaC06g06950D	C6	7497997	7499985	1772	299	32869.73	9.39	-0.626	4	nucl
<i>BnaCnn.NF-YA5</i>	BnaCnng30790D	Cn_R	29265164	29266560	1170	234	26028.40	9.61	-0.669	3	nucl
<i>BnaA01.NF-YA6</i>	BnaA01g29650D	A1	20492147	20493570	1034	308	33768.87	9.83	-0.638	4	nucl
<i>BnaC01.NF-YA6</i>	BnaC01g37260D	C1	36403731	36405134	1034	308	33961.12	9.73	-0.632	4	nucl
<i>BnaCnn.NF-YA6</i>	BnaCnng46640D	Cn_R	46011390	46011869	324	107	12211.62	5.56	-0.487	1	nucl
<i>BnaA09.NF-YA7</i>	BnaA09g26040D	A9	19158540	19160295	961	183	20800.31	9.04	-1.033	4	nucl
<i>BnaC05.NF-YA7</i>	BnaC05g23480D	C5	17579844	17581479	843	183	20802.31	9.06	-1.007	4	nucl
<i>BnaA09.NF-YA8</i>	BnaA09g44920D	A9	30778841	30780472	1186	322	35799.66	9.02	-0.856	4	nucl
<i>BnaA01.NF-YA9</i>	BnaA01g25500D	A1	17797274	17799488	763	180	20509.28	10.55	-1.228	2	nucl
<i>BnaA03.NF-YA9</i>	BnaA03g35980D	A3	17592029	17593794	1350	280	31103.08	8.97	-1.185	4	nucl
<i>BnaA05.NF-YA9</i>	BnaA05g19990D	A5	15425888	15427902	1478	294	32395.42	6.36	-1.090	4	nucl
<i>BnaC03.NF-YA9</i>	BnaC03g41820D	C3	26687276	26689145	1442	298	32927.06	8.92	-1.139	4	nucl
<i>BnaC05.NF-YA9</i>	BnaC05g31370D	C5	30686248	30688424	1605	298	32912.16	8.84	-1.107	4	nucl
<i>BnaA10.NF-YA10</i>	BnaA10g24470D	A10	15949384	15950501	853	267	29845.72	9.46	-0.675	3	nucl
<i>BnaC09.NF-YA10</i>	BnaC09g49050D	C9	47617066	47618130	804	267	29624.62	9.42	-0.578	3	nucl
<i>BnaA03.NF-YB1</i>	BnaA03g18200D	A3	8535232	8536613	756	166	18111.55	5.52	-0.331	2	nucl
<i>BnaA05.NF-YB1</i>	BnaA05g06260D	A5	3332868	3334807	1341	142	15283.00	4.95	-0.683	2	nucl
<i>BnaC03.NF-YB1</i>	BnaC03g21730D	C3	11759347	11760703	750	164	18071.54	5.23	-0.201	2	nucl
<i>BnaC04.NF-YB1</i>	BnaC04g06490D	C4	4728865	4731076	912	212	23063.97	8.09	-0.570	4	nucl
<i>BnaA02.NF-YB2</i>	BnaA02g25600D	A2	18785085	18785860	776	186	19901.88	5.96	-0.885	0	nucl
<i>BnaA09.NF-YB2</i>	BnaA09g18400D	A9	11446337	11447022	686	184	19883.80	9.96	-0.962	0	nucl
<i>BnaC02.NF-YB2</i>	BnaC02g33400D	C2	35853002	35853683	682	185	19967.00	6.30	-0.894	0	nucl
<i>BnaC07.NF-YB2</i>	BnaC07g20390D	C7	27011240	27011748	405	134	14620.21	4.80	-0.640	1	chlo
<i>BnaC09.NF-YB2</i>	BnaC09g20320D	C9	17368804	17369486	683	187	20177.12	6.07	-0.943	0	nucl
<i>BnaA01.NF-YB3</i>	BnaA01g28350D	A1	19803940	19804416	477	158	17024.90	6.06	-0.773	0	nucl

<i>BnaA03.NF-YB3</i>	BnaA03g33970D	A3	16504578	16505412	835	189	19644.46	6.16	-0.755	0	nucl
<i>BnaC01.NF-YB3</i>	BnaC01g35600D	C1	35046879	35047591	713	157	16829.72	6.21	-0.738	0	nucl
<i>BnaC03.NF-YB3</i>	BnaC03g39380D	C3	24331939	24332773	835	186	19548.41	6.30	-0.796	0	nucl
<i>BnaC05.NF-YB3</i>	BnaC05g37390D	C5	36433213	36433710	498	165	17461.26	5.95	-0.756	0	nucl
<i>BnaC05.NF-YB4</i>	BnaC05g06570D	C5	3248229	3248627	399	132	14857.47	6.15	-0.831	0	mito
<i>BnaA03.NF-YB5</i>	BnaA03g21860D	A3	10344600	10345070	471	156	17901.02	6.38	-0.900	0	nucl
<i>BnaA05.NF-YB5</i>	BnaA05g00200D	A5	100806	101457	519	172	19841.33	6.50	-0.783	1	nucl
<i>BnaC04.NF-YB5</i>	BnaC04g00090D	C4	31312	31998	687	155	17617.76	6.70	-0.852	0	nucl
<i>BnaA06.NF-YB6</i>	BnaA06g35340D	A6	23271611	23272448	696	231	25910.02	6.18	-0.723	1	nucl
<i>BnaA09.NF-YB6</i>	BnaA09g18420D	A9	11452614	11453343	665	209	23339.17	5.98	-0.666	1	nucl
<i>BnaC07.NF-YB6</i>	BnaC07g20410D	C7	27026011	27028908	1995	642	73177.87	7.61	-0.800	3	nucl
<i>BnaC09.NF-YB6</i>	BnaC09g20350D	C9	17373524	17374297	702	207	23164.04	5.98	-0.616	1	nucl
<i>BnaA03.NF-YB7</i>	BnaA03g38390D	A3	19081916	19082545	630	209	23901.25	5.84	-1.107	0	nucl
<i>BnaA09.NF-YB7</i>	BnaA09g08330D	A9	4084474	4085100	627	208	23718.17	5.84	-1.056	0	nucl
<i>BnaC03.NF-YB7</i>	BnaC03g45220D	C3	30228273	30228902	630	209	23897.26	5.84	-1.111	0	nucl
<i>BnaC09.NF-YB7</i>	BnaC09g08600D	C9	5489196	5489822	627	208	23791.22	5.58	-1.053	0	nucl
<i>BnaA03.NF-YB8</i>	BnaA03g16960D	A3	7957582	7959701	954	267	29515.26	8.80	-0.563	7	nucl
<i>BnaA04.NF-YB8a</i>	BnaA04g21270D	A4	16208767	16210237	585	194	21354.82	7.75	-0.634	3	nucl
<i>BnaA04.NF-YB8b</i>	BnaA04g21250D	A4	16196319	16197903	528	175	19276.37	6.42	-0.818	4	nucl
<i>BnaC03.NF-YB8</i>	BnaC03g20500D	C3	10865305	10867168	669	222	24355.50	8.98	-0.577	6	nucl
<i>BnaCnn.NF-YB8</i>	BnaCnng76740D	Cn_R	77820665	77822121	561	186	20667.95	6.97	-0.677	3	nucl
<i>BnaA07.NF-YB9</i>	BnaA07g10770D	A7	10129311	10131376	893	231	25381.37	5.96	-0.702	1	nucl
<i>BnaAnn.NF-YB9</i>	BnaAnng04140D	An_R	4158907	4163093	1283	342	37734.63	5.50	-0.391	2	plas
<i>BnaC07.NF-YB9</i>	BnaC07g14150D	C7	19943199	19945282	886	230	25358.34	5.96	-0.701	1	nucl
<i>BnaCnn.NF-YB9</i>	BnaCnng59920D	Cn_R	59697476	59698858	903	300	33181.05	5.39	-0.568	1	nucl
<i>BnaA09.NF-YB10</i>	BnaA09g33640D	A9	24770165	24772100	967	257	28388.05	9.44	-0.574	6	nucl

<i>BnaC08.NF-YB10</i>	BnaC08g24430D	C8	26421510	26423319	942	229	25235.36	9.62	-0.843	6	nucl
<i>BnaA07.NF-YB11</i>	BnaA07g13230D	A7	11774794	11775938	814	218	24038.64	4.34	-1.267	2	nucl
<i>BnaC03.NF-YB11</i>	BnaC03g47130D	C3	32107109	32108310	830	211	23501.18	4.42	-1.358	2	nucl
<i>BnaC04.NF-YB11</i>	BnaC04g16850D	C4	14822766	14823867	746	214	23519.08	4.36	-1.244	2	nucl
<i>BnaA10.NF-YB12</i>	BnaA10g23160D	A10	15378003	15379167	901	165	18428.65	4.57	-0.624	3	chlo
<i>BnaAnn.NF-YB12</i>	BnaAnng06230D	An_R	6195869	6197811	747	248	28398.43	6.72	-0.577	4	nucl
<i>BnaC02.NF-YB12</i>	BnaC02g01260D	C2	517056	519849	1629	240	27347.38	6.93	-0.523	5	cyto
<i>BnaC09.NF-YB12</i>	BnaC09g47720D	C9	46915815	46917083	964	166	18443.63	4.57	-0.651	3	chlo
<i>BnaA09.NF-YB13</i>	BnaA09g05430D	A9	2669540	2671009	1113	169	19047.31	4.74	-0.755	4	chlo
<i>BnaC09.NF-YB13</i>	BnaC09g05000D	C9	2888970	2890360	1061	169	19061.33	4.74	-0.754	4	chlo
<i>BnaA06.NF-YC4</i>	BnaA06g16420D	A6	9223546	9224734	1189	221	24244.41	5.06	-0.400	0	nucl
<i>BnaAnn.NF-YC4</i>	BnaAnng22700D	An_R	25505210	25506448	1113	273	29633.70	5.17	-0.285	3	chlo
<i>BnaC03.NF-YC4</i>	BnaC03g50810D	C3	35230481	35231749	1144	283	30821.17	5.54	-0.292	2	chlo
<i>BnaC08.NF-YC4</i>	BnaC08g20340D	C8	23076932	23078225	1294	221	24301.47	5.06	-0.414	0	nucl
<i>BnaCnn.NF-YC4</i>	BnaCnng15880D	Cn_R	14839773	14840940	1011	264	29559.47	5.09	-0.381	2	chlo
<i>BnaA06.NF-YC9</i>	BnaA06g05230D	A6	2982168	2983799	1400	220	24496.60	5.23	-0.535	1	nucl
<i>BnaA08.NF-YC9</i>	BnaA08g26690D	A8	17990349	17991630	1201	191	21299.78	5.13	-0.688	1	nucl
<i>BnaA09.NF-YC9</i>	BnaA09g48620D	A9	32533160	32534650	1491	228	25421.53	5.10	-0.665	0	nucl
<i>BnaC05.NF-YC9</i>	BnaC05g06520D	C5	3224198	3228539	2674	327	36931.74	7.08	-0.641	2	mito
<i>BnaC08.NF-YC9</i>	BnaC08g42880D	C8	36874233	36875771	1382	254	28661.58	5.75	-0.477	2	nucl
<i>BnaCnn.NF-YC9</i>	BnaCnng06510D	Cn_R	5706615	5711120	891	296	33273.15	9.44	-0.462	3	chlo
<i>BnaA06.NF-YC10</i>	BnaA06g04450D	A6	2644126	2645359	534	177	20110.71	8.51	-0.927	3	nucl
<i>BnaA09.NF-YC10</i>	BnaA09g49120D	A9	32763228	32764356	705	181	20346.87	9.04	-0.931	3	nucl
<i>BnaC05.NF-YC10</i>	BnaC05g05650D	C5	2744017	2745474	733	182	20606.17	9.04	-0.925	3	nucl
<i>BnaC08.NF-YC10</i>	BnaC08g43430D	C8	37158427	37160035	726	182	20412.79	8.87	-1.004	3	nucl
<i>BnaA01.NF-YC11</i>	BnaA01g30580D	A1	20947665	20949601	1079	289	31884.32	4.99	-0.936	5	chlo

<i>BnaA03.NF-YC11</i>	BnaA03g32260D	A3	15566754	15568973	1064	287	31999.61	5.02	-0.894	5	chlo
<i>BnaA10.NF-YC11</i>	BnaA10g23530D	A10	15532923	15534807	1135	299	33266.07	5.08	-0.892	5	chlo
<i>BnaC01.NF-YC11</i>	BnaC01g38370D	C1	37474332	37476339	1052	293	32473.95	4.96	-0.998	5	chlo
<i>BnaC03.NF-YC11a</i>	BnaC03g37550D	C3	22991247	22993437	1077	287	31947.45	5.00	-0.891	5	chlo
<i>BnaC03.NF-YC11b</i>	BnaC03g37560D	C3	22999722	23001891	1021	287	31876.33	4.95	-0.898	5	chlo
<i>BnaC09.NF-YC11</i>	BnaC09g48240D	C9	47154793	47156984	1330	302	33389.18	5.03	-0.853	5	chlo
<i>BnaA06.NF-YC13</i>	BnaA06g36810D	A6	24060533	24061095	563	130	14755.12	9.99	-0.589	0	nucl
<i>BnaC07.NF-YC13</i>	BnaC07g16980D	C7	22984339	22984728	390	129	14623.94	9.82	-0.518	0	cyto

Note: Chrom., Chromosome; MW, molecular weight; PI, isoelectric point; plas, plasma membrane; cyto, cytoplasm; nucl, nucleus; mito, mitochondrion; chlo, chloroplast membrane

Table S4. Non-synonymous (Ka) and synonymous (Ks) nucleotide substitution rates for the *NF-Y* coding loci in *Arabidopsis* and *B. napus*

<i>Arabidopsis</i> ID	<i>Arabidopsis</i> gene name	<i>B. napus</i> ID	<i>B. napus</i> gene name	Ka	Ks	Ka/Ks
AT5G12840	<i>AtNF-YA1</i>	BnaA02g01270D	<i>BnaA02.NF-YA1</i>	0.123206444	0.363923937	0.338549986
		BnaA03g04040D	<i>BnaA03.NF-YA1</i>	0.113379103	0.399024259	0.284140877
		BnaA10g29990D	<i>BnaA10.NF-YA1</i>	0.086137438	0.453682105	0.189862983
		BnaC02g04360D	<i>BnaC02.NF-YA1</i>	0.200575809	0.535990039	0.374215553
		BnaC03g05640D	<i>BnaC03.NF-YA1</i>	0.090648897	0.394859789	0.229572369
		BnaC09g44190D	<i>BnaC09.NF-YA1</i>	0.081562819	0.46978933	0.173615733
AT3G05690	<i>AtNF-YA2</i>	BnaA03g29140D	<i>BnaA03.NF-YA2</i>	0.089695461	0.236286725	0.379604318
		BnaAnnng02740D	<i>BnaAnn.NF-YA2</i>	0.082756096	0.235848573	0.350886568
		BnaC05g46110D	<i>BnaC05.NF-YA2a</i>	0.110122404	0.432598157	0.254560502
		BnaC05g19190D	<i>BnaC05.NF-YA2b</i>	0.089695461	0.236286725	0.379604318
AT1G72830	<i>AtNF-YA3</i>	BnaA02g16180D	<i>BnaA02.NF-YA3</i>	0.092854126	0.381774624	0.243217123
		BnaA07g30460D	<i>BnaA07.NF-YA3</i>	0.096342883	0.397583178	0.242321327
		BnaC02g21570D	<i>BnaC02.NF-YA3</i>	0.057713923	0.396554157	0.145538565
		BnaC04g27090D	<i>BnaC04.NF-YA3</i>	0.568510165	1.027176765	0.553468677
		BnaCnng68450D	<i>BnaCnn.NF-YA3</i>	0.084005481	0.390937173	0.214882304
		BnaC06g33980D	<i>BnaC06.NF-YA3a</i>	0.122057951	0.407260383	0.299704945
		BnaC06g33950D	<i>BnaC06.NF-YA3b</i>	0.400651814	1.009180615	0.397007045
AT2G34720	<i>AtNF-YA4</i>	BnaA05g09110D	<i>BnaA05.NF-YA4</i>	0.055388482	0.35121232	0.157706547
		BnaC04g10470D	<i>BnaC04.NF-YA4</i>	0.057921477	0.347937887	0.166470737

AT1G54160	<i>AtNF-YA5</i>	BnaA06g01280D	<i>BnaA06.NF-YA5</i>	0.096088016	0.293035724	0.327905468
		BnaA08g00840D	<i>BnaA08.NF-YA5</i>	0.09892116	0.26773276	0.369477235
		BnaAnng31560D	<i>BnaAnn.NF-YA5</i>	0.11253172	0.363629865	0.309467759
		BnaCnng30790D	<i>BnaCnn.NF-YA5</i>	0.089497011	0.350047728	0.255670881
		BnaC06g10580D	<i>BnaC06.NF-YA5a</i>	0.115658252	0.334091219	0.346187644
		BnaC06g06950D	<i>BnaC06.NF-YA5b</i>	0.143846681	0.273085089	0.52674674
AT3G14020	<i>AtNF-YA6</i>	BnaA01g29650D	<i>BnaA01.NF-YA6</i>	0.135360039	0.407230764	0.332391486
		BnaC01g37260D	<i>BnaC01.NF-YA6</i>	0.161708692	0.44600353	0.362572672
		BnaCnng46640D	<i>BnaCnn.NF-YA6</i>	0.310501222	0.834205277	0.372212009
AT1G30500	<i>AtNF-YA7</i>	BnaA09g26040D	<i>BnaA09.NF-YA7</i>	0.095063779	0.392823605	0.242001189
		BnaC05g23480D	<i>BnaC05.NF-YA7</i>	0.100786029	0.408402511	0.246781119
AT1G17590	<i>AtNF-YA8</i>	BnaA09g44920D	<i>BnaA09.NF-YA8</i>	0.125409141	0.295604306	0.424246664
AT3G20910	<i>AtNF-YA9</i>	BnaA01g25500D	<i>BnaA01.NF-YA9</i>	0.166691594	0.323992561	0.514492043
		BnaA03g35980D	<i>BnaA03.NF-YA9</i>	0.104666588	0.310372326	0.337229126
		BnaA05g19990D	<i>BnaA05.NF-YA9</i>	0.128819569	0.312106595	0.412742222
		BnaC03g41820D	<i>BnaC03.NF-YA9</i>	0.133212103	0.291257099	0.457369462
		BnaC05g31370D	<i>BnaC05.NF-YA9</i>	0.103894636	0.319339745	0.325342014
AT5G06510	<i>AtNF-YA10</i>	BnaA10g24470D	<i>BnaA10.NF-YA10</i>	0.154110067	0.33217843	0.463937609
		BnaC09g49050D	<i>BnaC09.NF-YA10</i>	0.130075029	0.374068741	0.347730282
AT2G38880	<i>AtNF-YB1</i>	BnaA03g18200D	<i>BnaA03.NF-YB1</i>	0.066205861	0.642079383	0.103111645
		BnaA05g06260D	<i>BnaA05.NF-YB1</i>	0.026055595	0.699719294	0.037237211
		BnaC03g21730D	<i>BnaC03.NF-YB1</i>	0.127492277	0.776262735	0.164238564
		BnaC04g06490D	<i>BnaC04.NF-YB1</i>	0.028179678	0.60428387	0.046633179
AT5G47640	<i>AtNF-YB2</i>	BnaA02g25600D	<i>BnaA02.NF-YB2</i>	0.021341096	0.542844819	0.039313438
		BnaA09g18400D	<i>BnaA09.NF-YB2</i>	0.053140933	0.65883763	0.080658619

		BnaC02g33400D	<i>BnaC02.NF-YB2</i>	0.029914234	0.614717775	0.048663363
		BnaC07g20390D	<i>BnaC07.NF-YB2</i>	0.15305107	0.667759808	0.229200782
		BnaC09g20320D	<i>BnaC09.NF-YB2</i>	0.042945541	0.634800297	0.067652049
AT4G14540	<i>AtNF-YB3</i>	BnaA01g28350D	<i>BnaA01.NF-YB3</i>	0.071749967	2.096129498	0.03422974
		BnaA03g33970D	<i>BnaA03.NF-YB3</i>	0.095164179	1.082254924	0.087931389
		BnaC01g35600D	<i>BnaC01.NF-YB3</i>	0.075475652	1.693158276	0.044576844
		BnaC03g39380D	<i>BnaC03.NF-YB3</i>	0.109742558	1.279799715	0.085749791
		BnaC05g37390D	<i>BnaC05.NF-YB3</i>	0.102870693	1.302235919	0.078995435
AT1G09030	<i>AtNF-YB4</i>	BnaC05g06570D	<i>BnaC05.NF-YB4</i>	0.062840476	0.411313097	0.152780148
AT2G47810	<i>AtNF-YB5</i>	BnaA03g21860D	<i>BnaA03.NF-YB5</i>	0.067572049	0.333462599	0.202637565
		BnaA05g00200D	<i>BnaA05.NF-YB5</i>	0.071177129	0.435694181	0.163364883
		BnaC04g00090D	<i>BnaC04.NF-YB5</i>	0.060853731	0.424551608	0.143336476
AT5G47670	<i>AtNF-YB6</i>	BnaA06g35340D	<i>BnaA06.NF-YB6</i>	0.078734964	0.318895365	0.246899054
		BnaA09g18420D	<i>BnaA09.NF-YB6</i>	0.0860104	0.339749556	0.25315824
		BnaC07g20410D	<i>BnaC07.NF-YB6</i>	0.077979497	0.32319918	0.241273808
		BnaC09g20350D	<i>BnaC09.NF-YB6</i>	0.075377191	0.401508403	0.187735028
AT2G13570	<i>AtNF-YB7</i>	BnaA03g38390D	<i>BnaA03.NF-YB7</i>	0.060116495	0.58257099	0.103191707
		BnaA09g08330D	<i>BnaA09.NF-YB7</i>	0.092067404	0.561638115	0.163926559
		BnaC03g45220D	<i>BnaC03.NF-YB7</i>	0.057903174	0.566459221	0.102219492
		BnaC09g08600D	<i>BnaC09.NF-YB7</i>	0.096594591	0.514347497	0.187800255
AT2G37060	<i>AtNF-YB8</i>	BnaA03g16960D	<i>BnaA03.NF-YB8</i>	0.024195647	0.519860385	0.046542586
		BnaC03g20500D	<i>BnaC03.NF-YB8</i>	0.027181577	0.468270547	0.058046737
		BnaCnng76740D	<i>BnaCnn.NF-YB8</i>	0.112764055	0.667858351	0.168844268
		BnaA04g21270D	<i>BnaA04.NF-YB8a</i>	0.109969019	0.756128763	0.145436894
		BnaA04g21250D	<i>BnaA04.NF-YB8b</i>	0.055869978	0.600688936	0.093009834

AT1G21970	<i>AtNF-YB9</i>	BnaA07g10770D	<i>BnaA07.NF-YB9</i>	0.133651589	0.372078279	0.359202879
		BnaAnng04140D	<i>BnaAnn.NF-YB9</i>	0.141221022	0.451235599	0.31296516
		BnaC07g14150D	<i>BnaC07.NF-YB9</i>	0.13450359	0.39070561	0.34425815
		BnaCnng59920D	<i>BnaCnn.NF-YB9</i>	0.155006326	0.484280048	0.320075804
AT3G53340	<i>AtNF-YB10</i>	BnaA09g33640D	<i>BnaA09.NF-YB10</i>	0.067636791	0.64453695	0.104938578
		BnaC08g24430D	<i>BnaC08.NF-YB10</i>	0.064919396	0.583278426	0.11130087
AT2G27470	<i>AtNF-YB11</i>	BnaA07g13230D	<i>BnaA07.NF-YB11</i>	0.111953809	0.439657499	0.254638689
		BnaC03g47130D	<i>BnaC03.NF-YB11</i>	0.175594224	0.464327703	0.378168743
		BnaC04g16850D	<i>BnaC04.NF-YB11</i>	0.118420342	0.414308974	0.285826158
AT5G08190	<i>AtNF-YB12</i>	BnaA10g23160D	<i>BnaA10.NF-YB12</i>	0.052605826	0.766766884	0.068607327
		BnaAnng06230D	<i>BnaAnn.NF-YB12</i>	0.059478157	0.755103555	0.078768213
		BnaC02g01260D	<i>BnaC02.NF-YB12</i>	0.040909936	0.700346819	0.058413824
		BnaC09g47720D	<i>BnaC09.NF-YB12</i>	0.044497434	0.611055381	0.072820623
AT5G23090	<i>AtNF-YB13</i>	BnaA09g05430D	<i>BnaA09.NF-YB13</i>	0.024436551	0.43695398	0.05592477
		BnaC09g05000D	<i>BnaC09.NF-YB13</i>	0.024480868	0.383119218	0.063898825
AT5G63470	<i>AtNF-YC4</i>	BnaA06g16420D	<i>BnaA06.NF-YC4</i>	0.078420002	1.336788947	0.058662964
		BnaAnng22700D	<i>BnaAnn.NF-YC4</i>	0.071783343	0.866964626	0.082798468
		BnaC03g50810D	<i>BnaC03.NF-YC4</i>	0.072795672	0.919600095	0.07916014
		BnaC08g20340D	<i>BnaC08.NF-YC4</i>	0.072937439	1.25650267	0.058047978
		BnaCnng15880D	<i>BnaCnn.NF-YC4</i>	0.104856762	1.091525183	0.096064446
AT1G08970	<i>AtNF-YC9</i>	BnaA06g05230D	<i>BnaA06.NF-YC9</i>	0.064934937	0.772524486	0.084055507
		BnaA08g26690D	<i>BnaA08.NF-YC9</i>	0.065604843	0.5585245	0.117460995
		BnaA09g48620D	<i>BnaA09.NF-YC9</i>	0.022906186	0.928760126	0.024663189
		BnaC05g06520D	<i>BnaC05.NF-YC9</i>	0.040635441	0.657009939	0.061849051
		BnaC08g42880D	<i>BnaC08.NF-YC9</i>	0.096649615	1.33604327	0.072340183

		BnaCnng06510D	<i>BnaCnn.NF-YC9</i>	0.051065937	0.652484434	0.078263839
AT1G07980	<i>AtNF-YC10</i>	BnaA06g04450D	<i>BnaA06.NF-YC10</i>	0.124296411	0.569634163	0.218203926
		BnaA09g49120D	<i>BnaA09.NF-YC10</i>	0.134666801	0.520784828	0.25858434
		BnaC05g05650D	<i>BnaC05.NF-YC10</i>	0.138155856	0.799182189	0.172871541
		BnaC08g43430D	<i>BnaC08.NF-YC10</i>	0.104334602	0.505678145	0.206326105
AT3G12480	<i>AtNF-YC11</i>	BnaA01g30580D	<i>BnaA01.NF-YC11</i>	0.07596472	0.389199158	0.195182128
		BnaA03g32260D	<i>BnaA03.NF-YC11</i>	0.085501735	0.357857763	0.238926589
		BnaA10g23530D	<i>BnaA10.NF-YC11</i>	0.190063509	0.752055453	0.252725392
		BnaC01g38370D	<i>BnaC01.NF-YC11</i>	0.082479048	0.418247156	0.197201694
		BnaC09g48240D	<i>BnaC09.NF-YC11</i>	0.193291066	0.793276087	0.243661783
		BnaC03g37550D	<i>BnaC03.NF-YC11a</i>	0.083992688	0.380505975	0.220739473
		BnaC03g37560D	<i>BnaC03.NF-YC11b</i>	0.082274188	0.364130862	0.225946759
AT5G43250	<i>AtNF-YC13</i>	BnaA06g36810D	<i>BnaA06.NF-YC13</i>	0.132230004	0.789131531	0.167563959
		BnaC07g16980D	<i>BnaC07.NF-YC13</i>	0.099905629	0.807475036	0.123725967

Table S5. FPKM values of the *NF-Y* family genes in leaf and root of *B. napus* under N, P and K deficiencies based on the RNA-seq data

Gene name	Gene ID	Leaf_CK	Leaf_LN	Leaf_LP	Leaf_LK	Root_CK	Root_LN	Root_LP	Root_LK
<i>BnaA02.NF-YA1</i>	BnaA02g01270D	2.13	1.20	0.68	1.35	0.76	0.92	0.85	0.71
<i>BnaA03.NF-YA1</i>	BnaA03g04040D	0.06	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>BnaA10.NF-YA1</i>	BnaA10g29990D	4.34	10.42	4.48	2.98	6.17	7.89	5.71	5.86
<i>BnaC02.NF-YA1</i>	BnaC02g04360D	0.37	0.52	0.62	0.17	0.14	0.00	0.20	0.10
<i>BnaC03.NF-YA1</i>	BnaC03g05640D	0.78	2.23	1.33	0.94	2.44	1.95	3.15	2.36
<i>BnaC09.NF-YA1</i>	BnaC09g44190D	4.49	8.78	4.44	4.23	6.54	5.95	5.43	5.78
<i>BnaA03.NF-YA2</i>	BnaA03g29140D	0.71	6.11	1.17	0.67	19.90	184.26	127.73	37.71
<i>BnaAnn.NF-YA2</i>	BnaAnnng02740D	0.28	3.89	0.52	0.22	0.35	14.39	1.65	0.28
<i>BnaC05.NF-YA2a</i>	BnaC05g46110D	0.06	0.14	0.07	0.00	0.20	0.72	0.21	0.20
<i>BnaC05.NF-YA2b</i>	BnaC05g19190D	0.52	4.71	1.28	0.88	21.19	173.82	162.28	44.08
<i>BnaA02.NF-YA3</i>	BnaA02g16180D	0.40	3.30	0.72	0.61	1.09	16.56	3.41	2.12
<i>BnaA07.NF-YA3</i>	BnaA07g30460D	0.71	4.02	1.21	0.67	2.73	25.60	6.76	4.63
<i>BnaC02.NF-YA3</i>	BnaC02g21570D	2.05	10.29	4.15	3.47	10.49	40.67	16.23	10.70
<i>BnaC04.NF-YA3</i>	BnaC04g27090D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>BnaC06.NF-YA3a</i>	BnaC06g33980D	2.06	11.67	2.83	2.63	5.37	52.07	13.41	8.70
<i>BnaC06.NF-YA3b</i>	BnaC06g33950D	0.00	0.00	0.00	2.38	0.00	0.00	0.00	0.08
<i>BnaCnn.NF-YA3</i>	BnaCnnng68450D	0.28	6.23	0.70	0.94	4.18	50.00	10.53	5.31
<i>BnaA05.NF-YA4</i>	BnaA05g09110D	28.47	51.66	27.77	18.87	13.82	25.47	15.71	11.57
<i>BnaC04.NF-YA4</i>	BnaC04g10470D	33.27	62.13	42.52	31.95	8.25	15.39	9.91	8.45
<i>BnaA06.NF-YA5</i>	BnaA06g01280D	0.31	5.87	0.94	0.58	0.38	1.32	0.42	0.28
<i>BnaA08.NF-YA5</i>	BnaA08g00840D	0.17	0.58	0.15	0.02	0.32	0.77	0.31	0.25

<i>BnaAnn.NF-YA5</i>	BnaAnng31560D	0.06	2.36	0.72	0.16	0.75	0.57	1.03	0.30
<i>BnaC06.NF-YA5a</i>	BnaC06g10580D	1.03	5.07	1.84	1.57	2.29	4.18	2.88	1.47
<i>BnaC06.NF-YA5b</i>	BnaC06g06950D	0.64	5.52	1.05	0.92	0.49	2.30	1.35	0.85
<i>BnaCnn.NF-YA5</i>	BnaCnng30790D	0.84	1.21	0.60	0.67	0.73	0.94	1.19	0.69
<i>BnaA01.NF-YA6</i>	BnaA01g29650D	0.00	0.12	0.00	0.00	0.03	0.39	0.09	0.00
<i>BnaC01.NF-YA6</i>	BnaC01g37260D	0.99	36.71	2.33	1.76	5.95	90.87	10.69	7.29
<i>BnaCnn.NF-YA6</i>	BnaCnng46640D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>BnaA09.NF-YA7</i>	BnaA09g26040D	5.55	19.41	47.02	8.07	4.17	8.17	20.08	2.92
<i>BnaC05.NF-YA7</i>	BnaC05g23480D	0.61	9.35	8.45	1.45	7.85	12.79	18.11	5.13
<i>BnaA09.NF-YA8</i>	BnaA09g44920D	0.00	0.04	0.00	0.02	0.88	0.86	0.89	1.49
<i>BnaA01.NF-YA9</i>	BnaA01g25500D	0.00	0.04	0.07	0.11	0.00	0.00	0.00	0.11
<i>BnaA03.NF-YA9</i>	BnaA03g35980D	0.73	5.62	1.23	0.47	4.46	5.49	4.23	3.24
<i>BnaA05.NF-YA9</i>	BnaA05g19990D	0.00	0.09	0.00	0.00	0.00	0.08	0.00	0.00
<i>BnaC03.NF-YA9</i>	BnaC03g41820D	17.87	25.51	14.93	12.84	16.14	17.93	15.29	11.17
<i>BnaC05.NF-YA9</i>	BnaC05g31370D	4.25	12.49	5.51	4.38	4.59	11.84	7.67	5.23
<i>BnaA10.NF-YA10</i>	BnaA10g24470D	0.45	4.50	0.17	0.05	0.11	15.00	0.38	0.11
<i>BnaC09.NF-YA10</i>	BnaC09g49050D	0.57	12.31	1.08	0.26	0.71	38.50	3.12	1.35
<i>BnaA03.NF-YB1</i>	BnaA03g18200D	0.28	1.04	0.57	0.33	0.63	0.13	0.56	0.52
<i>BnaA05.NF-YB1</i>	BnaA05g06260D	4.20	15.29	6.59	5.41	15.87	18.21	16.28	14.73
<i>BnaC03.NF-YB1</i>	BnaC03g21730D	0.24	1.34	0.40	0.40	0.16	0.25	0.29	0.16
<i>BnaC04.NF-YB1</i>	BnaC04g06490D	2.41	7.42	3.40	3.63	5.74	5.37	5.95	4.06
<i>BnaA02.NF-YB2</i>	BnaA02g25600D	37.87	54.30	38.80	32.88	11.68	11.42	10.50	11.70
<i>BnaA09.NF-YB2</i>	BnaA09g18400D	44.97	53.46	35.97	42.97	11.85	16.61	10.32	9.66
<i>BnaC02.NF-YB2</i>	BnaC02g33400D	14.24	40.53	26.63	12.47	9.81	19.98	16.58	9.65
<i>BnaC07.NF-YB2</i>	BnaC07g20390D	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<i>BnaC09.NF-YB2</i>	BnaC09g20320D	17.39	18.62	15.73	16.44	8.04	8.11	6.27	9.21

[illegible]

<i>BnaA09.NF-YB10</i>	BnaA09g33640D	4.12	8.16	5.34	4.24	17.75	24.24	31.82	24.55
<i>BnaC08.NF-YB10</i>	BnaC08g24430D	1.89	4.68	7.09	1.59	12.43	20.20	21.42	19.30
<i>BnaA07.NF-YB11</i>	BnaA07g13230D	4.16	5.45	2.55	3.82	9.33	8.29	9.68	9.41
<i>BnaC03.NF-YB11</i>	BnaC03g47130D	4.63	4.64	4.05	4.50	6.70	5.16	6.51	6.28
<i>BnaC04.NF-YB11</i>	BnaC04g16850D	9.48	10.69	7.56	8.31	17.24	18.29	20.93	20.88
<i>BnaA10.NF-YB12</i>	BnaA10g23160D	2.66	9.76	3.22	3.62	10.22	14.34	11.60	9.67
<i>BnaAnn.NF-YB12</i>	BnaAnng06230D	0.03	0.06	0.00	0.00	0.31	0.24	0.12	0.28
<i>BnaC02.NF-YB12</i>	BnaC02g01260D	1.73	3.90	2.06	1.85	7.79	8.63	7.79	8.38
<i>BnaC09.NF-YB12</i>	BnaC09g47720D	4.82	14.08	4.37	4.46	18.51	16.78	17.26	16.65
<i>BnaA09.NF-YB13</i>	BnaA09g05430D	2.54	7.93	3.48	3.16	10.01	7.90	7.23	7.11
<i>BnaC09.NF-YB13</i>	BnaC09g05000D	3.89	8.69	5.14	4.45	10.73	8.92	9.14	7.71
<i>BnaA06.NF-YC4</i>	BnaA06g16420D	14.69	2.96	5.14	10.66	0.96	0.35	0.32	0.26
<i>BnaAnn.NF-YC4</i>	BnaAnng22700D	34.98	25.03	32.45	36.16	37.83	34.95	37.58	30.11
<i>BnaC03.NF-YC4</i>	BnaC03g50810D	33.32	20.03	38.54	34.95	30.25	22.53	29.88	27.92
<i>BnaC08.NF-YC4</i>	BnaC08g20340D	32.60	10.60	17.66	31.02	5.87	2.94	3.27	3.57
<i>BnaCnn.NF-YC4</i>	BnaCnng15880D	1.58	3.19	1.87	2.24	3.94	4.11	2.99	4.38
<i>BnaA06.NF-YC9</i>	BnaA06g05230D	1.09	17.30	2.16	1.19	1.81	12.17	3.55	2.88
<i>BnaA08.NF-YC9</i>	BnaA08g26690D	0.19	1.69	0.51	0.36	4.76	11.45	9.59	4.65
<i>BnaA09.NF-YC9</i>	BnaA09g48620D	11.06	15.51	7.63	9.94	18.98	23.43	17.14	20.50
<i>BnaC05.NF-YC9</i>	BnaC05g06520D	3.11	20.14	3.47	2.38	1.34	3.25	1.78	1.42
<i>BnaC08.NF-YC9</i>	BnaC08g42880D	20.84	54.77	19.77	21.23	50.07	54.97	48.24	53.57
<i>BnaCnn.NF-YC9</i>	BnaCnng06510D	0.07	0.07	0.47	0.05	0.27	0.84	1.24	0.26
<i>BnaA06.NF-YC10</i>	BnaA06g04450D	2.88	9.01	2.51	3.69	5.67	5.43	4.86	4.12
<i>BnaA09.NF-YC10</i>	BnaA09g49120D	1.49	0.56	1.83	2.19	2.26	1.66	2.02	1.44
<i>BnaC05.NF-YC10</i>	BnaC05g05650D	6.51	9.12	4.75	8.40	12.42	10.00	10.57	10.19
<i>BnaC08.NF-YC10</i>	BnaC08g43430D	1.14	1.46	0.87	1.07	2.70	1.49	1.53	1.01

<i>BnaA01.NF-YC11</i>	BnaA01g30580D	4.99	8.51	3.70	4.14	10.83	11.36	11.37	9.18
<i>BnaA03.NF-YC11</i>	BnaA03g32260D	5.86	11.13	5.11	6.33	7.23	6.18	5.15	5.57
<i>BnaA10.NF-YC11</i>	BnaA10g23530D	4.94	9.09	5.10	4.97	9.74	9.82	10.27	9.20
<i>BnaC01.NF-YC11</i>	BnaC01g38370D	4.80	13.12	4.76	4.58	14.99	16.88	13.60	11.61
<i>BnaC03.NF-YC11a</i>	BnaC03g37550D	4.48	9.59	4.75	5.29	8.59	9.17	8.74	7.07
<i>BnaC03.NF-YC11b</i>	BnaC03g37560D	96.91	2.90	224.92	188.01	30.01	0.62	21.12	36.09
<i>BnaC09.NF-YC11</i>	BnaC09g48240D	9.81	17.90	10.62	8.92	23.07	27.02	18.41	19.23
<i>BnaA06.NF-YC13</i>	BnaA06g36810D	5.23	14.79	5.22	8.75	14.65	11.05	13.01	14.23
<i>BnaC07.NF-YC13</i>	BnaC07g16980D	24.04	33.03	16.27	27.00	24.77	28.32	29.64	37.42

Note: CK, full strength Afdaling's solution; LN, nitrogen deficiency; LP, phosphorus deficiency; LK, potassium deficiency

Table S6. Primers used for quantitative real-time PCR in this study

Gene name	Forward primer	Reverse primer
<i>BnaA01.NF-YA6</i>	GCTTCTTGGCCTCTACATGG	GGCATTGACGAAGATTGGTT
<i>BnaA01.NF-YC11</i>	CGAGATGGAACTCGAGACCG	TGCCTAACTCCATAGGCCAG
<i>BnaA02.NF-YA3</i>	AGTCCAACAGGAAAGCGAAA	ATTGGGAAACCTGAAAACCTGG
<i>BnaA03.NF-YA2</i>	GAAGGTCTTCCCTCTGCTCCA	TGGCACAACCTCTTGGACTCT
<i>BnaA07.NF-YA3</i>	AAGCTTGAAGGTGGTGGATG	TGTCATTGCGCCTGACTTAG
<i>BnaA09.NF-YC9</i>	ATTGTTCCGAGGGAGGATCT	CTGATCAGGTCCCTGTTGCT
<i>BnaA10.NF-YC11</i>	CGGTATCACGATGCCTTCAC	ACCCGGATACTCCTCTGGTT
<i>BnaC01.NF-YC11</i>	CAGTCCCAGCTGCAGACAA	TCCTCGTCTATCCTCTTACCCA
<i>BnaC05.NF-YA2b</i>	CTGAAACGGTTGTAAGAGCATCTA	GCATATGAACAACACACGATC
<i>BnaC05.NF-YC9</i>	CTTGACACGACACCCACCTTT	CATGGCTCCTGACTGTCCAT
<i>BnaC06.NF-YA3a</i>	TTGCTCCTCCGCAGACTAAT	CATGGTATTGCTTCGCATTG
<i>BnaC08.NF-YC4</i>	GTCCTACCAACGCCAAGAGA	GGTGAGCTCGAGGATGAA
<i>BnaC08.NF-YC9</i>	TTCCGAGGGAGGATCTGAGG	AAGCTAATTCTCCACCAGGGTT
<i>BnaC09.NF-YB12</i>	TGAACAGCGGAGCAGAGATG	AGTTGCTGCTCTTGATCTGGT
<i>BnaC09.NF-YC11</i>	TGCAAGCTGACGAGGATGTT	CATTACCGAGACCGTGACCG
<i>BnaCnm.NF-YA3</i>	AAAGGCCAAGAGGATCTGGT	ATATCAGCACCGTCGGAAAC
<i>EF1-α</i>	GCCTGGTATGGTTGTGACCT	GAAGTTAGCAGCACCTTGG