

Table S1A Indels identified between H99 and F0 and F2 within genes with functional annotation

Chr	H99	F0 & F2	Gene	Gene function	Effect of mutation on protein
1	T	TCCCACA	CNAG_00545	IDN3-B	Insertion of PH in 5x string at 259 (of 1,933)
1	T	TGGTTCA	CNAG_00619	tubulin folding cofactor C	Insertion of EP in 4x string at 224 (of 356)
3	GTTC	G	CNAG_02824	uncharacterized ACR, COG1565	Deletion of R11 (of 543)
3	GCAT	G	CNAG_02796	phospho-2-dehydro-3-deoxyheptonate aldolase	Deletion of S in 7x string at 281 (of 544)
3	AGA	AC	CNAG_07527	α -1,6-mannosyl transferase	H232E, truncation at 250 (of 518)
3	A	AAGAAGC	CNAG_07580	CAMK/CAMKL/MARK protein kinase	Insertion of AS in 3x string at 513 (of 1,172)
3	GATCGTC	G	CNAG_06888	cytoplasmic protein	Deletion of SS in 5x string at 414 (1,037)
3	AG	A	CNAG_06888	cytoplasmic protein	G1024A (of 1,037)
3	A	ACAAGCC	CNAG_06920	ubiquitin-specific protease	Insertion of AQ in 3x string at 276 (of 1,109)
3	GAGA	G	CNAG_06920	ubiquitin-specific protease	Deletion of K501 (of 1,109)
3	C	CCTT	CNAG_06927	peptidyl-prolyl cis-trans isomerase	Insertion of E480 (of 513)
4	A	ATGATGAAG G	CNAG_05096	histone deacetylase 3	Insertion of SSP151 (of 490)
4	G	GGTT	CNAG_05138	exo- β -1,3-glucanase	Insertion of N37 (of 785)
4	C	CCAGAAA	CNAG_05248	clathrin binding protein	Insertion of KQ738 (of 751)
4	G	GT	CNAG_05274	STE/STE20/YSK protein kinase	G727V, truncation at 727 (of 765)
5	TA	T	CNAG_00974	beta-lactamase domain-containing protein	C188Stop (of 300)
7	G	GATGGA	CNAG_06533	ATP-dependent permease	Insertion of NGNG in 2x string at 648 (of 1,051)
7	AAAGAGACA TACGT	A	CNAG_06556	oxidoreductase	Q242R, truncation at 260 (of 323)
7	TC	T	CNAG_06623	<i>myo</i> -inositol oxygenase	S124L, truncation at 151 (of 315)
8	TCCCGCCACC	T	CNAG_03189	DIL and ankyrin domain-containing protein	G1093D (of 1,105)
8	TGTC	T	CNAG_03321	vacuolar protein sorting-associated protein 9	Deletion of T in 7x string at 131 (of 714)
8	TG	T	CNAG_03339	biotin transporter	H439P, truncation at 458 (of 503)
8	AG	ATA	CNAG_03519	cytoplasmic protein	Q453H, truncation at 459 (of 502)

Chr	H99	F0 & F2	Gene	Gene function	Effect of mutation on protein
8	TC	T	CNAG_03533	JmjC domain-containing histone demethylation protein 1	A505G, truncation at 557 (of 874)
9	A	AACC	CNAG_04213	signal transducer	Insertion of G152 (of 978)
9	A	AAGC	CNAG_04380	peptidase	Insertion of S in 6x string at 250 (of 688)
10	T	TAGA	CNAG_04792	phosphatidyl serine decarboxylase	Insertion of E in 4x string at 340 (of 1,230)
10	G	GA	CNAG_04696	DNA clamp loader	S438F, truncation at 444 (of 760)
11	A	ACGGTGATG G	CNAG_01809	small nuclear ribonucleoprotein hPrp3	Insertion of GGD501 (of 590)
11	TCAACTCCAA CTC	T	CNAG_02000	short-chain dehydrogenase	Deletion of SNSN in 3x string at 40 (of 358)
11	AG	A	CNAG_02016	DUF1479 domain-containing protein	V158L, truncation at 196 (of 493)
12	ACAG	A	CNAG_06193	CMGC/RCK protein kinase	Deletion of Q in 5x string at 94 (of 1,262)
13	A	AC	CNAG_06499	phosphatidic acid phosphatase type 2 domain containing 1 protein	C252V, truncation at 297 (of 382)

Table S1B Structural variation identified between H99 and F0 and F2

Chr	Type	Size (bp)	Gene	Gene name
1	Deletion	3,407	CNAG_00549	hypothetical protein
2	Deletion	47	CNAG_03991	integral membrane protein
2	Insertion	656	CNAG_04003 (intron)	pumilio 2
3	Deletion	383		
3	Deletion	3,409	CNAG_02711	hypothetical protein
3	Deletion	150	CNAG_02706, CNAG_02707	hypothetical proteins
4	Deletion	539		
4	Deletion	557	CNAG_05266 (intron)	membrane protein
5	Deletion	302	CNAG_06863	hypothetical protein
5	Deletion	716	CNAG_06843	hypothetical protein
5	Deletion	7,459	CNAG_01367, CNAG_01368	hypothetical proteins
5	Deletion	475		
5	Deletion	1,413	CNAG_01032	hypothetical protein
6	Deletion	260		
6	Insertion	664		
7	Tandem duplication	643	CNAG_06557	membrane protein
7	Deletion	323		
7	Insertion/duplication	7,464	CNAG_00813/01368, CNAG_00814/01367	hypothetical proteins
7	Deletion	7,155	CNAG_05911, CNAG_05910	hypothetical proteins
7	Insertion/duplication	9,600	CNAG_07313, CNAG_00127, CNAG_00128	hypothetical proteins
8	Insertion	1,033	CNAG_07707	glycoside hydrolase family 3 domain-containing protein
8	Insertion	915	CNAG_03195	hypothetical protein
8	Deletion	114		
8	Deletion	7,132	CNAG_03477, CNAG_03478	hypothetical proteins
8	Deletion	99		
10	Deletion	556	CNAG_07836 (intron)	NAD binding dehydrogenase family protein
10	Insertion	402		
10	Insertion	432	CNAG_04901	hypothetical protein
10	Insertion	664		
10	Deletion	5,210		
10	Deletion	246		
11	Deletion	7,427	CNAG_07613, CNAG_01968	hypothetical proteins
13	Deletion	77	CNAG_06336	glucan 1,3 beta-glucosidase
13	Deletion	15		
14	Deletion	591		

14	Deletion	165		
14	Deletion	248		
14	Deletion	85		
14	Deletion	592	CNAG_07874	sugar transporter
14	Deletion	11	CNAG_05643	hypothetical protein
