

**Supplemental Table S2: Mutations found in the genome-reduced strains IIG-Bs27-47-24, PG10 and PS38**

The variations were detected with a minimal coverage of 25 and a minimum variant frequency of 0.8 compared to the *Bacillus subtilis* Δ6 sequence (CP010314)

**Color code for the single mutations**

unique in this strain
present in all strains
present in IIG-Bs27-47-24 and PG10
present in IIG-Bs27-47-24 and PS38
present in PG10 and PS38

**Legend**

- 1 Locus tag of the gene referring to the *Bacillus subtilis* 168 sequence (NC\_000946)
- 2 Coding sequence position
- 3 Start point of the mutation referring to the *Bacillus subtilis* Δ6 sequence (CP010314)
- 4 End point of the mutation referring to the *Bacillus subtilis* Δ6 sequence (CP010314)
- 5 Coverage at the given genome position of the mutation
- 6 Frequency of the mutation at the given genome position

**Mutations in IIG-Bs27-47-24**

Gene	Locus tag <sup>1</sup>	CDS Position <sup>2</sup>	Nucleotide Change	Polymorphism Type	Codon Change	Amino Acid Change	Protein Effect	Minimum <sup>3</sup>	Maximum <sup>4</sup>	Coverage <sup>5</sup>	Variant Frequency <sup>6</sup>
mfd	BSU00550	1,612	G -> C	SNP (transversion)	GGC -> CGC	G -> R	Substitution	62,041	62,041	307	99.7%
			A -> G	SNP (transition)					171,679	171,679	222
ydfB	BSU05350	34	(A)10 -> (A)11	Insertion (tandem repeat)			Frame Shift	543,184	543,183	412	95.6%
yfiB	BSU07735	80	K -> T	SNP	AKG -> ATG	X -> M	Substitution	794,309	794,309	122	82.0%
yhdW	BSU09620	473	A -> C	SNP (transversion)	GTC -> GGC	V -> G	Substitution	987,924	987,924	214	99.5%
yjcD	BSU11820	1,986	T -> C	SNP (transition)	GGA -> GGG		None	1,203,852	1,203,852	292	97.9%
yjcD	BSU11820	1,906	C -> T	SNP (transition)	GAA -> AAA	E -> K	Substitution	1,203,932	1,203,932	226	100.0%
yjcD	BSU11820	1,826	T -> C	SNP (transition)	GAC -> GGC	D -> G	Substitution	1,204,012	1,204,012	261	99.2%
yjcR	BSU11960	296	A -> G	SNP (transition)	GAA -> GGA	E -> G	Substitution	1,217,840	1,217,840	277	98.6%
pit	BSU12840	682	C -> T	SNP (transition)	GCC -> ACC	A -> T	Substitution	1,265,548	1,265,548	255	99.2%
dgcW	BSU13420	2,209	-GAATTGTTCT -> G	Deletion	GAA,CAA,TTC ->	EQF ->	Deletion	1,323,122	1,323,130	260	100.0%
			T -> G	SNP (transversion)					1,457,594	1,457,594	242
ymzA	BSU17360	218	(A)9 -> (A)8	Deletion (tandem repeat)			Frame Shift	1,709,166	1,709,166	301	100.0%
scuA	BSU21750	243	T -> G	SNP (transversion)	AAA -> AAC	K -> N	Substitution	1,998,446	1,998,446	350	99.7%
gpsB	BSU22180	199	(T)6 -> (T)7	Insertion (tandem repeat)			Frame Shift	2,038,282	2,038,281	172	99.4%
trpC	BSU22660	672	C -> T	SNP (transition)	GCG -> GCA		None	2,080,621	2,080,621	273	100.0%
trpC	BSU22660	669	C -> T	SNP (transition)	GGG -> GGA		None	2,080,624	2,080,624	257	100.0%
trpC	BSU22660	660	A -> T	SNP (transversion)	AAT -> AAA	N -> K	Substitution	2,080,633	2,080,633	238	100.0%
trpC	BSU22660	606	AG -> GT	Substitution	TCC,TTG -> TCA,CTG		None	2,080,686	2,080,687	189 -> 194	98.5% -> 98.9%
trpC	BSU22660	593	A -> G	SNP (transition)	GTT -> GCT	V -> A	Substitution	2,080,700	2,080,700	188	99.5%
trpC	BSU22660	591	G -> A	SNP (transition)	CTC -> CTT		None	2,080,702	2,080,702	191	100.0%
trpC	BSU22660	566	T -> A	SNP (transversion)	AAG -> ATG	K -> M	Substitution	2,080,727	2,080,727	215	99.5%
trpC	BSU22660	562	TAC -> GAT	Substitution	GTA -> ATC	V -> I	Substitution	2,080,729	2,080,731	200 -> 208	99.0%
trpC	BSU22660	558	T -> G	SNP (transversion)	ACA -> ACC		None	2,080,735	2,080,735	189	99.5%
trpC	BSU22660	549	C -> A	SNP (transversion)	ACG -> ACT		None	2,080,744	2,080,744	190	100.0%
trpC	BSU22660	534	A -> G	SNP (transition)	AAT -> AAC		None	2,080,759	2,080,759	212	99.5%
trpC	BSU22660	531	A -> G	SNP (transition)	AAT -> AAC		None	2,080,762	2,080,762	220	98.6%

trpC	BSU22660	526 C -> T	SNP (transition)	GTA -> ATA	V -> I	Substitution	2,080,767	2,080,767	228	100.0%
trpC	BSU22660	516 G -> A	SNP (transition)	GAC -> GAT		None	2,080,777	2,080,777	240	100.0%
trpC	BSU22660	513 G -> A	SNP (transition)	CCC -> CCT		None	2,080,780	2,080,780	233	100.0%
trpC	BSU22660	510 T -> C	SNP (transition)	ACA -> ACG		None	2,080,783	2,080,783	237	98.7%
trpC	BSU22660	504 C -> T	SNP (transition)	GTG -> GTA		None	2,080,789	2,080,789	233	99.6%
trpC	BSU22660	478 A -> T	SNP (transversion)	TCA -> ACA	S -> T	Substitution	2,080,815	2,080,815	263	99.6%
trpC	BSU22660	446 C -> T	SNP (transition)	GGG -> GAG	G -> E	Substitution	2,080,847	2,080,847	310	99.7%
trpC	BSU22660	393 C -> T	SNP (transition)	GAG -> GAA		None	2,080,900	2,080,900	270	99.3%
trpC	BSU22660	345 T -> C	SNP (transition)	GTA -> GTG		None	2,080,948	2,080,948	284	99.3%
trpC	BSU22660	326 +TAA	Insertion	TTT -> TTT,ATT	F -> FI	Insertion	2,080,968	2,080,967	254 -> 261	100.0%
trpC	BSU22660	315 A -> G	SNP (transition)	CTT -> CTC		None	2,080,978	2,080,978	266	98.9%
trpC	BSU22660	306 A -> T	SNP (transversion)	ATT -> ATA		None	2,080,987	2,080,987	268	100.0%
trpC	BSU22660	294 A -> G	SNP (transition)	CGT -> CGC		None	2,080,999	2,080,999	206	99.5%
trpC	BSU22660	229 T -> G	SNP (transversion)	ATT -> CTT	I -> L	Substitution	2,081,064	2,081,064	220	99.5%
trpC	BSU22660	219 C -> T	SNP (transition)	AAG -> AAA		None	2,081,074	2,081,074	225	100.0%
trpC	BSU22660	210 CC -> TT	Substitution	GAG,GCT -> GAA,ACT	EA -> ET	Substitution	2,081,082	2,081,083	224 -> 233	99.1% -> 99.6%
trpC	BSU22660	191 T -> C	SNP (transition)	CAG -> CGG	Q -> R	Substitution	2,081,102	2,081,102	215	100.0%
trpC	BSU22660	175 C -> T	SNP (transition)	GAT -> AAT	D -> N	Substitution	2,081,118	2,081,118	204	99.5%
trpC	BSU22660	147 T -> C	SNP (transition)	GCA -> GCG		None	2,081,146	2,081,146	204	100.0%
trpC	BSU22660	132 G -> A	SNP (transition)	GCC -> GCT		None	2,081,161	2,081,161	181	100.0%
trpC	BSU22660	107 G -> A	SNP (transition)	CCG -> CTG	P -> L	Substitution	2,081,186	2,081,186	150	100.0%
trpC	BSU22660	90 C -> T	SNP (transition)	AAG -> AAA		None	2,081,203	2,081,203	169	100.0%
trpC	BSU22660	75 C -> T	SNP (transition)	GAG -> GAA		None	2,081,218	2,081,218	152	100.0%
		(A)8 -> (A)7	Deletion (tandem repeat)				2,090,875	2,090,875	298	100.0%
spoVAF	BSU23390	891 -G	Deletion			Frame Shift	2,145,367	2,145,367	138	100.0%
yqhO	BSU24510	649 (T)8 -> (T)7	Deletion (tandem repeat)			Frame Shift	2,249,068	2,249,068	165	100.0%
yteP	BSU30135	225 (C)4 -> (C)3	Deletion (tandem repeat)			Frame Shift	2,744,313	2,744,313	239	100.0%
		A -> G	SNP (transition)				2,834,354	2,834,354	204	99.0%
		T -> A	SNP (transversion)				2,839,755	2,839,755	153	96.1%
		A -> G	SNP (transition)				2,849,468	2,849,468	274	98.5%
		A -> T	SNP (transversion)				2,849,471	2,849,471	236	99.6%
		G -> T	SNP (transversion)				2,849,473	2,849,473	261	99.2%
		GT -> TG	Substitution				2,849,475	2,849,476	257 -> 260	98.8% -> 99.2%
degQ	BSU31720	87 A -> G	SNP (transition)	ATT -> ATC		None	2,918,458	2,918,458	246	99.2%
pncA	BSU31760	234 T -> C	SNP (transition)	GGA -> GGG		None	2,922,521	2,922,521	450	99.3%
yusT	BSU32920	350 -C	Deletion			Frame Shift	3,039,554	3,039,554	234	100.0%
		A -> G	SNP (transition)				3,256,558	3,256,558	246	99.2%
ywIC	BSU36950	657 C -> A	SNP (transversion)	GTG -> GTT		None	3,454,666	3,454,666	219	99.5%
narK	BSU37320	1,077 C -> T	SNP (transition)	GGG -> GGA		None	3,493,751	3,493,751	223	99.1%
		C -> T	SNP (transition)				3,543,354	3,543,354	192	96.9%
		T -> A	SNP (transversion)				3,598,864	3,598,864	370	100.0%
htpG	BSU39820	1,631 C -> T	SNP (transition)	GGC -> GAC	G -> D	Substitution	3,750,991	3,750,991	135	99.3%
asnH	BSU39920	2,154 T -> G	SNP (transversion)	CTT -> CTG		None	3,762,391	3,762,391	310	100.0%
glxK	BSU40040	1,143 C -> T	SNP (transition)	CTG -> CTA		None	3,773,391	3,773,391	371	100.0%
glxK	BSU40040	597 T -> C	SNP (transition)	ACA -> ACG		None	3,773,937	3,773,937	177	99.4%
fbp	BSU40190	1,908 G -> A	SNP (transition)	GTG -> GTA		None	3,791,248	3,791,248	162	100.0%

Mutations in PG10

Gene	Locus tag <sup>1</sup>	CDS Position <sup>2</sup>	Nucleotide Change	Polymorphism Type	Codon Change	Amino Acid Change	Protein Effect	Minimum <sup>3</sup>	Maximum <sup>4</sup>	Coverage <sup>5</sup>	Variant Frequency <sup>6</sup>
mfd	BSU00550	1,612	G -> C	SNP (transversion)	GGC -> CGC	G -> R	Substitution	62,041	62,041	254	98.4%
			T -> G	SNP (transversion)				164,907	164,907	311	87.8%
			T -> G	SNP (transversion)				164,908	164,908	304	94.7%
			T -> G	SNP (transversion)				164,909	164,909	300	83.7%
			T -> A	SNP (transversion)				164,910	164,910	294	81.6%
			G -> C	SNP (transversion)				169,383	169,383	40	87.5%
			+C	Insertion				169,839	169,838	43	90.7%
			A -> G	SNP (transition)				171,679	171,679	65	92.3%
ydfB	BSU05350	34	(A)10 -> (A)11	Insertion (tandem repeat)			Frame Shift	543,184	543,183	229	95.2%
			(T)17 -> (T)16	Deletion (tandem repeat)				472,564	472,564	163	85.9%
ydfJ	BSU05430	1,223	G -> A	SNP (transition)	GGA -> GAA	G -> E	Substitution	552,396	552,396	227	99.6%
yfIB	BSU07735	80	K -> T	SNP	AKG -> ATG	X -> M	Substitution	794,309	794,309	93	93.5%
yhdW	BSU09620	473	A -> C	SNP (transversion)	GTC -> GGC	V -> G	Substitution	987,924	987,924	182	99.5%
yjcD	BSU11820	1,986	T -> C	SNP (transition)	GGA -> GGG		None	1,203,852	1,203,852	174	98.3%
yjcD	BSU11820	1,906	C -> T	SNP (transition)	GAA -> AAA	E -> K	Substitution	1,203,932	1,203,932	145	99.3%
yjcD	BSU11820	1,826	T -> C	SNP (transition)	GAC -> GGC	D -> G	Substitution	1,204,012	1,204,012	168	100.0%
yjcR	BSU11960	296	A -> G	SNP (transition)	GAA -> GGA	E -> G	Substitution	1,217,840	1,217,840	171	100.0%
pit	BSU12840	682	C -> T	SNP (transition)	GCC -> ACC	A -> T	Substitution	1,265,548	1,265,548	153	98.7%
dgcW	BSU13420	2,209	-GAATTGTC	Deletion	GAA,CAA,TTC ->	EQF ->	Deletion	1,323,122	1,323,130	191	100.0%
			T -> G	SNP (transversion)				1,457,594	1,457,594	246	100.0%
ymzA	BSU17360	218	(A)9 -> (A)8	Deletion (tandem repeat)			Frame Shift	1,709,166	1,709,166	179	100.0%
thyA	BSU17680	230	A -> T	SNP (transversion)	CAG -> CTG	Q -> L	Substitution	1,743,253	1,743,253	243	98.4%
ynzD	BSU17920	44	G -> A	SNP (transition)	GCA -> GTA	A -> V	Substitution	1,763,776	1,763,776	139	97.1%
scuA	BSU21750	243	T -> G	SNP (transversion)	AAA -> AAC	K -> N	Substitution	1,998,446	1,998,446	215	97.2%
gpsB	BSU22180	199	(T)6 -> (T)7	Insertion (tandem repeat)			Frame Shift	2,038,282	2,038,281	137	100.0%
trpC	BSU22660	672	C -> T	SNP (transition)	GCG -> GCA		None	2,080,621	2,080,621	185	99.5%
trpC	BSU22660	669	C -> T	SNP (transition)	GGG -> GGA		None	2,080,624	2,080,624	190	98.9%
trpC	BSU22660	660	A -> T	SNP (transversion)	AAT -> AAA	N -> K	Substitution	2,080,633	2,080,633	189	98.4%
trpC	BSU22660	606	AG -> GT	Substitution	TCC,TTG -> TCA,CTG		None	2,080,686	2,080,687	171 -> 172	99.4%
trpC	BSU22660	593	A -> G	SNP (transition)	GTT -> GCT	V -> A	Substitution	2,080,700	2,080,700	179	100.0%
trpC	BSU22660	591	G -> A	SNP (transition)	CTC -> CTT		None	2,080,702	2,080,702	180	98.9%
trpC	BSU22660	566	T -> A	SNP (transversion)	AAG -> ATG	K -> M	Substitution	2,080,727	2,080,727	180	100.0%
trpC	BSU22660	562	TAC -> GAT	Substitution	GTA -> ATC	V -> I	Substitution	2,080,729	2,080,731	181 -> 184	96.7% -> 97.2%
trpC	BSU22660	558	T -> G	SNP (transversion)	ACA -> ACC		None	2,080,735	2,080,735	172	100.0%
trpC	BSU22660	549	C -> A	SNP (transversion)	ACG -> ACT		None	2,080,744	2,080,744	162	100.0%
trpC	BSU22660	534	A -> G	SNP (transition)	AAT -> AAC		None	2,080,759	2,080,759	171	98.8%
trpC	BSU22660	531	A -> G	SNP (transition)	AAT -> AAC		None	2,080,762	2,080,762	170	98.2%
trpC	BSU22660	526	C -> T	SNP (transition)	GTA -> ATA	V -> I	Substitution	2,080,767	2,080,767	174	98.9%
trpC	BSU22660	516	G -> A	SNP (transition)	GAC -> GAT		None	2,080,777	2,080,777	183	99.5%
trpC	BSU22660	513	G -> A	SNP (transition)	CCC -> CCT		None	2,080,780	2,080,780	190	98.9%
trpC	BSU22660	510	T -> C	SNP (transition)	ACA -> ACG		None	2,080,783	2,080,783	188	100.0%
trpC	BSU22660	504	C -> T	SNP (transition)	GTG -> GTA		None	2,080,789	2,080,789	198	99.5%
trpC	BSU22660	478	A -> T	SNP (transversion)	TCA -> ACA	S -> T	Substitution	2,080,815	2,080,815	204	99.5%
trpC	BSU22660	446	C -> T	SNP (transition)	GGG -> GAG	G -> E	Substitution	2,080,847	2,080,847	180	100.0%
trpC	BSU22660	393	C -> T	SNP (transition)	GAG -> GAA		None	2,080,900	2,080,900	183	100.0%

trpC	BSU22660	345 T -> C	SNP (transition)	GTA -> GTG		None	2,080,948	2,080,948	175 99.4%
trpC	BSU22660	326 +TAA	Insertion	TTT -> TTT,ATT	F -> FI	Insertion	2,080,968	2,080,967	168 -> 169 98.2%
trpC	BSU22660	315 A -> G	SNP (transition)	CTT -> CTC		None	2,080,978	2,080,978	162 100.0%
trpC	BSU22660	306 A -> T	SNP (transversion)	ATT -> ATA		None	2,080,987	2,080,987	161 99.4%
trpC	BSU22660	294 A -> G	SNP (transition)	CGT -> CGC		None	2,080,999	2,080,999	134 100.0%
trpC	BSU22660	229 T -> G	SNP (transversion)	ATT -> CTT	I -> L	Substitution	2,081,064	2,081,064	144 97.9%
trpC	BSU22660	219 C -> T	SNP (transition)	AAG -> AAA		None	2,081,074	2,081,074	142 100.0%
trpC	BSU22660	210 CC -> TT	Substitution	GAG,GCT -> GAA,ACT	EA -> ET	Substitution	2,081,082	2,081,083	141 -> 147 95.0% -> 95.2%
trpC	BSU22660	191 T -> C	SNP (transition)	CAG -> CGG	Q -> R	Substitution	2,081,102	2,081,102	127 97.6%
trpC	BSU22660	175 C -> T	SNP (transition)	GAT -> AAT	D -> N	Substitution	2,081,118	2,081,118	120 98.3%
trpC	BSU22660	147 T -> C	SNP (transition)	GCA -> GCG		None	2,081,146	2,081,146	126 99.2%
trpC	BSU22660	132 G -> A	SNP (transition)	GCC -> GCT		None	2,081,161	2,081,161	129 100.0%
trpC	BSU22660	107 G -> A	SNP (transition)	CCG -> CTG	P -> L	Substitution	2,081,186	2,081,186	137 99.3%
trpC	BSU22660	90 C -> T	SNP (transition)	AAG -> AAA		None	2,081,203	2,081,203	152 98.0%
trpC	BSU22660	75 C -> T	SNP (transition)	GAG -> GAA		None	2,081,218	2,081,218	142 98.6%
		(A)8 -> (A)7	Deletion (tandem repeat)				2,090,875	2,090,875	160 100.0%
spoVAF	BSU23390	891 -G	Deletion			Frame Shift	2,145,367	2,145,367	103 100.0%
yqhO	BSU24510	649 (T)8 -> (T)7	Deletion (tandem repeat)			Frame Shift	2,249,068	2,249,068	128 100.0%
tcyL	BSU29360	90 C -> G	SNP (transversion)	CTG -> CTC		None	2,667,801	2,667,801	205 100.0%
yteP	BSU30135	225 (C)4 -> (C)3	Deletion (tandem repeat)			Frame Shift	2,744,313	2,744,313	166 100.0%
		A -> G	SNP (transition)				2,834,354	2,834,354	155 99.4%
		A -> G	SNP (transition)				2,849,468	2,849,468	174 98.9%
		A -> T	SNP (transversion)				2,849,471	2,849,471	168 97.0%
		G -> T	SNP (transversion)				2,849,473	2,849,473	174 97.7%
		GT -> TG	Substitution				2,849,475	2,849,476	185 98.4%
degQ	BSU31720	87 A -> G	SNP (transition)	ATT -> ATC		None	2,918,458	2,918,458	159 100.0%
pncA	BSU31760	234 T -> C	SNP (transition)	GGA -> GGG		None	2,922,521	2,922,521	255 100.0%
yusT	BSU32920	350 -C	Deletion			Frame Shift	3,039,554	3,039,554	158 100.0%
		A -> G	SNP (transition)				3,256,558	3,256,558	167 100.0%
ywIC	BSU36950	657 C -> A	SNP (transversion)	GTG -> GTT		None	3,454,666	3,454,666	171 97.1%
narK	BSU37320	1,077 C -> T	SNP (transition)	GGG -> GGA		None	3,493,751	3,493,751	158 99.4%
		C -> T	SNP (transition)				3,543,354	3,543,354	171 95.9%
		T -> A	SNP (transversion)				3,598,864	3,598,864	250 99.6%
htpG	BSU39820	1,631 C -> T	SNP (transition)	GGC -> GAC	G -> D	Substitution	3,750,991	3,750,991	174 94.8%
asnH	BSU39920	2,154 T -> G	SNP (transversion)	CTT -> CTG		None	3,762,391	3,762,391	301 98.3%
glxK	BSU40040	1,143 C -> T	SNP (transition)	CTG -> CTA		None	3,773,391	3,773,391	263 99.6%
glxK	BSU40040	597 T -> C	SNP (transition)	ACA -> ACG		None	3,773,937	3,773,937	165 100.0%
fbp	BSU40190	1,908 G -> A	SNP (transition)	GTG -> GTA		None	3,791,248	3,791,248	239 97.5%

Mutations in PS38

Gene	Locus tag <sup>1</sup>	CDS Position <sup>2</sup>	Nucleotide Change	Polymorphism Type	Codon Change	Amino Acid Change	Protein Effect	Minimum <sup>3</sup>	Maximum <sup>4</sup>	Coverage <sup>5</sup>	Variant Frequency <sup>6</sup>
gyrA	BSU00070	648	T -> C	SNP (transition)	CCT -> CCC		None	7,641	7,641	242	99.6%
mfd	BSU00550	1,612	G -> C	SNP (transversion)	GGC -> CGC	G -> R	Substitution	62,041	62,041	328	99.4%
			T -> G	SNP (transversion)				166,761	166,761	29	89.7%
			ACT -> CTC	Substitution				166,844	166,846	72 -> 128	95.8% -> 97.7%
			G -> C	SNP (transversion)				169,383	169,383	64	89.1%
			A -> G	SNP (transition)				170,064	170,064	31	83.9%
			A -> G	SNP (transition)				170,389	170,389	46	87.0%
			A -> G	SNP (transition)				171,679	171,679	76	97.4%
			(T)17 -> (T)16	Deletion (tandem repeat)				472,564	472,564	217	81.6%
ydfB	BSU05350	34	(A)10 -> (A)11	Insertion (tandem repeat)			Frame Shift	543,184	543,183	332	95.8%
yflB	BSU07735	80	K -> T	SNP	AKG -> ATG	X -> M	Substitution	794,309	794,309	121	88.4%
yhdW	BSU09620	473	A -> C	SNP (transversion)	GTC -> GGC	V -> G	Substitution	987,924	987,924	229	99.1%
yjcD	BSU11820	1,986	T -> C	SNP (transition)	GGA -> GGG		None	1,203,852	1,203,852	290	99.7%
yjcD	BSU11820	1,906	C -> T	SNP (transition)	GAA -> AAA	E -> K	Substitution	1,203,932	1,203,932	266	98.5%
yjcD	BSU11820	1,826	T -> C	SNP (transition)	GAC -> GGC	D -> G	Substitution	1,204,012	1,204,012	248	99.2%
yjcR	BSU11960	296	A -> G	SNP (transition)	GAA -> GGA	E -> G	Substitution	1,217,840	1,217,840	248	99.6%
pit	BSU12840	682	C -> T	SNP (transition)	GCC -> ACC	A -> T	Substitution	1,265,548	1,265,548	201	100.0%
dgcW	BSU13420	2,209	-GAATTGTTCT -> G	Deletion	GAA,CAA,TTC ->	EQF ->	Deletion	1,323,122	1,323,130	291	99.7%
			T -> G	SNP (transversion)				1,457,594	1,457,594	354	98.6%
ymzA	BSU17360	218	(A)9 -> (A)8	Deletion (tandem repeat)			Frame Shift	1,709,166	1,709,166	275	100.0%
scuA	BSU21750	243	T -> G	SNP (transversion)	AAA -> AAC	K -> N	Substitution	1,998,446	1,998,446	302	92.4%
gpsB	BSU22180	199	(T)6 -> (T)7	Insertion (tandem repeat)			Frame Shift	2,038,282	2,038,281	232	99.6%
trpC	BSU22660	672	C -> T	SNP (transition)	GCG -> GCA		None	2,080,621	2,080,621	270	98.5%
trpC	BSU22660	669	C -> T	SNP (transition)	GGG -> GGA		None	2,080,624	2,080,624	280	98.9%
trpC	BSU22660	660	A -> T	SNP (transversion)	AAT -> AAA	N -> K	Substitution	2,080,633	2,080,633	261	98.1%
trpC	BSU22660	606	AG -> GT	Substitution	TCC,TTG -> TCA,CTG		None	2,080,686	2,080,687	241 -> 243	98.8% -> 99.2%
trpC	BSU22660	593	A -> G	SNP (transition)	GTT -> GCT	V -> A	Substitution	2,080,700	2,080,700	254	100.0%
trpC	BSU22660	591	G -> A	SNP (transition)	CTC -> CTT		None	2,080,702	2,080,702	253	98.0%
trpC	BSU22660	566	T -> A	SNP (transversion)	AAG -> ATG	K -> M	Substitution	2,080,727	2,080,727	261	97.3%
trpC	BSU22660	562	TAC -> GAT	Substitution	GTA -> ATC	V -> I	Substitution	2,080,729	2,080,731	255 -> 260	98.4% -> 98.5%
trpC	BSU22660	558	T -> G	SNP (transversion)	ACA -> ACC		None	2,080,735	2,080,735	242	100.0%
trpC	BSU22660	549	C -> A	SNP (transversion)	ACG -> ACT		None	2,080,744	2,080,744	239	98.7%
trpC	BSU22660	534	A -> G	SNP (transition)	AAT -> AAC		None	2,080,759	2,080,759	246	100.0%
trpC	BSU22660	531	A -> G	SNP (transition)	AAT -> AAC		None	2,080,762	2,080,762	240	99.6%
trpC	BSU22660	526	C -> T	SNP (transition)	GTA -> ATA	V -> I	Substitution	2,080,767	2,080,767	242	99.2%
trpC	BSU22660	516	G -> A	SNP (transition)	GAC -> GAT		None	2,080,777	2,080,777	263	99.6%
trpC	BSU22660	513	G -> A	SNP (transition)	CCC -> CCT		None	2,080,780	2,080,780	273	97.1%
trpC	BSU22660	510	T -> C	SNP (transition)	ACA -> ACG		None	2,080,783	2,080,783	273	99.3%
trpC	BSU22660	504	C -> T	SNP (transition)	GTG -> GTA		None	2,080,789	2,080,789	274	98.5%
trpC	BSU22660	478	A -> T	SNP (transversion)	TCA -> ACA	S -> T	Substitution	2,080,815	2,080,815	289	99.3%
trpC	BSU22660	446	C -> T	SNP (transition)	GGG -> GAG	G -> E	Substitution	2,080,847	2,080,847	255	99.2%
trpC	BSU22660	393	C -> T	SNP (transition)	GAG -> GAA		None	2,080,900	2,080,900	277	99.3%
trpC	BSU22660	345	T -> C	SNP (transition)	GTA -> GTG		None	2,080,948	2,080,948	243	100.0%
trpC	BSU22660	326	+TAA	Insertion	TTT -> TTT,ATT	F -> FI	Insertion	2,080,968	2,080,967	226 -> 228	97.3% -> 97.4%
trpC	BSU22660	315	A -> G	SNP (transition)	CTT -> CTC		None	2,080,978	2,080,978	214	98.6%



trpC	BSU22660	306 A -> T	SNP (transversion)	ATT -> ATA		None	2,080,987	2,080,987	219 99.5%
trpC	BSU22660	294 A -> G	SNP (transition)	CGT -> CGC		None	2,080,999	2,080,999	187 98.9%
trpC	BSU22660	229 T -> G	SNP (transversion)	ATT -> CTT	I -> L	Substitution	2,081,064	2,081,064	188 99.5%
trpC	BSU22660	219 C -> T	SNP (transition)	AAG -> AAA		None	2,081,074	2,081,074	187 98.9%
trpC	BSU22660	210 CC -> TT	Substitution	GAG,GCT -> GAA,ACT	EA -> ET	Substitution	2,081,082	2,081,083	194 -> 199 97.9% -> 98.0%
trpC	BSU22660	191 T -> C	SNP (transition)	CAG -> CGG	Q -> R	Substitution	2,081,102	2,081,102	174 100.0%
trpC	BSU22660	175 C -> T	SNP (transition)	GAT -> AAT	D -> N	Substitution	2,081,118	2,081,118	159 98.1%
trpC	BSU22660	147 T -> C	SNP (transition)	GCA -> GCG		None	2,081,146	2,081,146	179 100.0%
trpC	BSU22660	132 G -> A	SNP (transition)	GCC -> GCT		None	2,081,161	2,081,161	176 100.0%
trpC	BSU22660	107 G -> A	SNP (transition)	CCG -> CTG	P -> L	Substitution	2,081,186	2,081,186	189 97.9%
trpC	BSU22660	90 C -> T	SNP (transition)	AAG -> AAA		None	2,081,203	2,081,203	187 97.9%
trpC	BSU22660	75 C -> T	SNP (transition)	GAG -> GAA		None	2,081,218	2,081,218	183 100.0%
		(A)8 -> (A)7	Deletion (tandem repeat)				2,090,875	2,090,875	266 100.0%
spoVAF	BSU23390	891 -G	Deletion			Frame Shift	2,145,367	2,145,367	173 100.0%
yqhO	BSU24510	649 (T)8 -> (T)7	Deletion (tandem repeat)			Frame Shift	2,249,068	2,249,068	169 100.0%
mutSB	BSU28580	652 A -> T	SNP (transversion)	TCC -> ACC	S -> T	Substitution	2,583,954	2,583,954	356 98.9%
		T -> G	SNP (transversion)				2,721,539	2,721,539	276 99.6%
		A -> G	SNP (transition)				2,834,354	2,834,354	232 99.6%
		T -> A	SNP (transversion)				2,839,755	2,839,755	25 80.0%
		A -> G	SNP (transition)				2,849,468	2,849,468	218 99.1%
		A -> T	SNP (transversion)				2,849,471	2,849,471	206 98.1%
		G -> T	SNP (transversion)				2,849,473	2,849,473	219 98.6%
		GT -> TG	Substitution				2,849,475	2,849,476	228 97.8%
degQ	BSU31720	87 A -> G	SNP (transition)	ATT -> ATC		None	2,918,458	2,918,458	192 99.5%
pncA	BSU31760	234 T -> C	SNP (transition)	GGA -> GGG		None	2,922,521	2,922,521	336 99.4%
yusT	BSU32920	350 -C	Deletion			Frame Shift	3,039,554	3,039,554	213 100.0%
		A -> G	SNP (transition)				3,256,558	3,256,558	258 99.2%
tagC	BSU35770	664 G -> T	SNP (transversion)	GTA -> TTA	V -> L	Substitution	3,345,413	3,345,413	335 99.1%
ywIC	BSU36950	657 C -> A	SNP (transversion)	GTG -> GTT		None	3,454,666	3,454,666	220 99.1%
narK	BSU37320	1,077 C -> T	SNP (transition)	GGG -> GGA		None	3,493,751	3,493,751	247 99.2%
		C -> T	SNP (transition)				3,543,354	3,543,354	245 97.6%
		T -> A	SNP (transversion)				3,598,864	3,598,864	337 99.4%
htpG	BSU39820	1,631 C -> T	SNP (transition)	GGC -> GAC	G -> D	Substitution	3,750,991	3,750,991	235 99.6%
asnH	BSU39920	2,154 T -> G	SNP (transversion)	CTT -> CTG		None	3,762,391	3,762,391	436 99.3%
glxK	BSU40040	1,143 C -> T	SNP (transition)	CTG -> CTA		None	3,773,391	3,773,391	386 99.7%
fbp	BSU40190	1,908 G -> A	SNP (transition)	GTG -> GTA		None	3,791,248	3,791,248	303 98.7%