

**Supplemental Table 1.**  
**List of nucleotide polymorphisms identify in the genomes of the four strains used in the study**

mutant nature	product name	locus tag	nucleotide change	protein change	genomic position	ref	alt	Newman DZC	NYU Newman	NCBI LT50668.1	NCBI NC_009641.1
intergenic	promoter	NWNA_0002	NA	NA	2075	C	A	1			
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	A880T	K227I	157872	A	T	1	1		
hSNP	hsp70	NWNA_0005	A104G	S445S	87717	A	G	1		1	
intergenic	promoter	NWNA_0473	NA	NA	54525	G	A	1			
intergenic	promoter	NWNA_0668, NWNA_0667	NA	NA	747009	G	A	1			
intergenic	promoter	NWNA_0724	NA	NA	812220	C	A	1			
intergenic	promoter	NWNA_1036	NA	NA	2044045	T	A	1			
intergenic	promoter	NWNA_1036	NA	NA	2044045	G	C	1			
hSNP	hypothetical protein	NWNA_0545	T602G	L201R	304464	A	C	1			
hSNP	uacR	NWNA_0675	C365T	R199C	757767	G	A	1			
hSNP	hypothetical protein	NWNA_0842	C701A	A254D	930724	G	T	1			
hSNP	hsp70	NWNA_0079	T193A	N622Y	1007285	T	A	1			
hSNP	hsp70	NWNA_1307	T419G	V140G	1445345	T	G	1			
hSNP	hypothetical protein	NWNA_1372	T100C	S54P	1538868	A	G	1			
hSNP	hsp70	NWNA_1040	A275G	E702G	2044045	A	G	1			
hSNP	hypothetical protein	NWNA_1036	G452A	M134I	2166132	C	T	1			
hSNP	glucosamine-6-phosphatase	NWNA_0532	T279C	P93P	618892	T	C	1			
hSNP	hypothetical protein	NWNA_2252	T279C	I93I	2474681	T	C	1			
hsp70	hsp70	NWNA_1046	C106A	T98K	215370	C	A	1			
hSNP	hsp70	NWNA_0009	G208A	A79E	56230	G	A	1		1	
hSNP	hsp70	NWNA_1034	C239G	S79C	1188921	C	G	1		1	
intergenic	downstream	NWNA_0002	NA	NA	2075	T	C				1
intergenic	downstream	NWNA_0002	NA	NA	2077	C	A				1
intergenic	promoter	NWNA_0343, NWNA_0344	NA	NA	362294	T	A				1
intergenic	promoter	NWNA_0343, NWNA_0344	NA	NA	362277	A	C				1
hSNP	hsp70	NWNA_0407	A113T	N28I	456831	A	T				1
hSNP	hsp70	NWNA_0407	T114C	N39N	456832	T	C				1
hSNP	hsp70	NWNA_0201	G173A	G26E	1373465	C	T				1
hSNP	hsp70	NWNA_0201	A170G	E57V	1373466	T	C				1
hSNP	hsp70	NWNA_0201	C130A	R465S	1373711	C	A				1
hSNP	hsp70	NWNA_0204	G136C	H45P	1377872	G	C				1
hSNP	hsp70	NWNA_0204	T105G	R465H	1377873	T	G				1
hSNP	hsp70	NWNA_1308	C837P	P213P	1441314	C	T				1
hSNP	hsp70	NWNA_1308	T840G	G214G	1441315	T	G				1
hSNP	hsp70	NWNA_1308	G841C	G214S	1441316	G	C				1
hSNP	hsp70	NWNA_1308	A854G	K219K	1441320	A	G				1
hSNP	hsp70	NWNA_1308	G855C	A219P	1441330	G	C				1
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	A846C	T210P	1578838	A	C				1
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	C847G	T210R	1578839	C	G				1
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	A874G	K229R	1578906	A	G				1
intergenic	promoter	NWNA_2314	NA	NA	2542031	T	A				1
intergenic	promoter	NWNA_2314	NA	NA	2542034	T	A				1
intergenic	promoter	NWNA_2314	NA	NA	2542035	C	T				1
intergenic	promoter	NWNA_0470	NA	NA	267707	T	C				1
intergenic	promoter	NWNA_0343, NWNA_0344	NA	NA	362279	T	A				1
hSNP	hypothetical protein	NWNA_0375	T657A	N219K	423566	A	T				1
hSNP	hypothetical protein	NWNA_0421	A189G	L83L	472775	A	G				1
hSNP	hypothetical protein	NWNA_0421	T368A	V170V	472786	T	A				1
hSNP	hypothetical protein	NWNA_0421	A414G	R139P	472826	A	G				1
hSNP	hypothetical protein	NWNA_0421	T453C	A151A	473039	T	C				1
hSNP	hypothetical protein	NWNA_0421	A485T	I150I	473051	A	T				1
hSNP	hypothetical protein	NWNA_0421	C311T	L171L	473207	C	T				1
hSNP	hypothetical protein	NWNA_0421	A175G	L171L	473208	A	G				1
hSNP	hypothetical protein	NWNA_0421	G557A	A168A	473153	G	A				1
intergenic	promoter	NWNA_0426	NA	NA	476336	A	G				1
intergenic	promoter	NWNA_0426	NA	NA	476400	T	A				1
intergenic	promoter	NWNA_0426	NA	NA	476401	T	C				1
hSNP	hsp70	NWNA_0406, NWNA_0407	NA	NA	479405	C	T				1
hSNP	hsp70	NWNA_0406	T183G	I614I	519235	T	G				1
hSNP	hsp70	NWNA_0509	C194T	L552P	586902	C	T				1
hSNP	hsp70	NWNA_0509	C198A	H851N	586929	C	A				1
hSNP	hsp70	NWNA_0509	A202G	R674V	586930	A	G				1
intergenic	promoter	NWNA_0510	NA	NA	587079	C	T				1
intergenic	promoter	NWNA_0510	NA	NA	587114	C	T				1
intergenic	promoter	NWNA_0510, NWNA_0511	NA	NA	588072	T	G				1
hSNP	chaperone protein Hsp70	NWNA_0513	A861C	S215I	602110	A	C				1
hSNP	uvrB	NWNA_0726	G235A	A109T	614719	G	A				1
hSNP	uvrB	NWNA_0726	G337T	M111I	614767	G	T				1
hSNP	uvrB	NWNA_0726	G370C	V134L	614804	G	C				1
intergenic	promoter	NWNA_0811	NA	NA	807347	A	G				1
intergenic	promoter	NWNA_0811	NA	NA	807350	A	T				1
intergenic	promoter	NWNA_0811	NA	NA	807313	G	A				1
intergenic	promoter	NWNA_0811	NA	NA	807314	A	G				1
hSNP	RNA dependent RNA polymerase	NWNA_0819	A268G	T8E	807710	A	G				1
hSNP	hypothetical protein	NWNA_0856	A217T	I75L	966700	A	T				1
hSNP	hypothetical protein	NWNA_0856	T218A	I73K	966710	T	A				1
intergenic	promoter	NWNA_0913, NWNA_0920	NA	NA	997709	G	T				1
hSNP	glyoxylate shunt, Group 3 family protein	NWNA_0913	G1342C	K444N	1005209	G	C				1
intergenic	promoter	NWNA_0971, NWNA_0973	NA	NA	1078197	A	G				1
hSNP	hypothetical protein	NWNA_1101	T295A	S99T	1205713	T	A				1
hSNP	hypothetical protein	NWNA_1101	C304G	G102E	1205722	C	G				1
hSNP	hypothetical protein	NWNA_1101	T395G	V190D	1206013	T	G				1
hsp70	hypothetical protein	NWNA_1101	T397A	V190V	1206015	T	A				1
hSNP	hypothetical protein	NWNA_1101	T398A	L300M	1206016	T	A				1
hSNP	hypothetical protein	NWNA_1101	G628C	G210R	1206046	G	C				1
hSNP	hypothetical protein	NWNA_1101	G629A	G210E	1206047	G	A				1
hSNP	hypothetical protein	NWNA_1101	G630A	G210G	1206048	G	A				1
hSNP	hypothetical protein	NWNA_1101	G631C	G211R	1206049	G	C				1
hSNP	hypothetical protein	NWNA_1101	G632T	G211V	1206050	G	T				1
hSNP	hypothetical protein	NWNA_1101	G633A	G211S	1206051	G	A				1
hSNP	hypothetical protein	NWNA_1101	G634A	G212S	1206052	G	A				1
hSNP	hypothetical protein	NWNA_1101	G635T	G212V	1206053	G	T				1
hSNP	hsp70	NWNA_1167	C265A	A87E	1281985	C	A				1
hSNP	hsp70	NWNA_1194	C780T	D360D	1316068	C	T				1
hSNP	hypothetical protein	NWNA_1214	G148T	N90E	1330797	G	T				1
hSNP	hypothetical protein	NWNA_1214	T193G	V91G	1330798	T	G				1
hSNP	hsp70	NWNA_1201	G138T	G45G	1375503	C	A				1
hSNP	hsp70	NWNA_1201	C132A	F41L	1375515	G	T				1
hSNP	hsp70	NWNA_1201	T122C	F41L	1375516	A	G				1
hSNP	hsp70	NWNA_1204	A131T	N439Y	1375763	A	T				1
hSNP	hypothetical protein	NWNA_1206	C118T	G45G	1376330	C	T				1
hSNP	hypothetical protein	NWNA_1206	T168A	I66I	1376393	T	A				1
hSNP	hypothetical protein	NWNA_1206	G216A	N67E	1376394	G	A				1
hSNP	hypothetical protein	NWNA_1206	A211T	D74V	1376416	A	T				1
hSNP	hypothetical protein	NWNA_1206	G271A	E91K	1376466	G	A				1
hSNP	hypothetical protein	NWNA_1206	T281A	I94K	1376476	T	A				1
hSNP	hypothetical protein	NWNA_1206	C285A	A96A	1376480	C	A				1
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	C811G	P204R	1578903	C	G				1
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	A884T	E218D	1578846	A	T				1
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	A882T	G28L	1578874	A	T				1
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	G885T	G212V	1578887	G	T				1
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	A701G	G204R	1578903	A	G				1
hSNP	pyrimidine 5-carboxylate reductase	NWNA_1410	A702C	N209I	1578895	A	C				1
hSNP	GTP binding protein LepA	NWNA_1407	G116T	C386G	1655296	C	A				1
hSNP	hsp70	NWNA_1009	A625G	D39Y	1726463	T	C				1
hSNP	allophycocyanin accessory regulator Hca	NWNA_1655	G17A	R64I	1811770	C	T				1
hSNP											