

**Supplemental Table 1** Bacterial strains and Plasmids.

Strain or plasmid	Characteristics	Resistance	Reference
<i>Sinorhizobium</i>			
<i>melloti</i> strains			
Rm1021	SU47 str-21 (wild type)	Sm	Yuan et al., 2006
RmP110	Rm1021 with wild-type <i>pstC</i>	Sm	Yuan et al., 2006
RmH940	RmG212 ( <i>lac</i> ) derivative with FRT sites flanking Tn5-235	Sm Nm	Chain and Finan unpub.
RmP926 (A101)	pTH1522 (nt 9549-10988), pTH1937 (nt 1283082-1284751)	Sm Nm Gm	This study
RmP928 (ΔA102)	RmP927 with pTH1522 (nt 9549-10988), pTH1937 (nt 47717-48842), pTH1944	Sm Tc	This study
RmP930 (ΔA103)	RmP929 with pTH1522 (nt 90324-92124), pTH1937 (nt 47717-48842), pTH1944	Sm Nm Gm Tc	This study
RmP932 (ΔA104)	RmP931 with pTH1522 (nt 90324-92124), pTH1937 (nt 123788–125128), pTH1944	Sm Tc	This study
RmP934 (ΔA105)	RmP933 with pTH1522 (nt 184519-186200), pTH1937 (nt 123788–125128), pTH1944	Sm Nm Gm Tc	This study

RmP936 ( $\Delta$ A106)	RmP935 with pTH1522 (nt 184519-186200), pTH1937 (nt 250917-251809), pTH1944	Sm Tc	This study
RmP1969 (A257)	pTH1522 (nt 262769-264696), pTH1937 (nt 254828-255655)	Sm Nm Gm	This study
RmP2681 ( $\Delta$ A160)	$\Phi\Delta$ A105(nt 123788-186200) $\rightarrow\Delta$ A102(nt 9549-48842), pTH1944	Sm Gm	This study
RmP979 ( $\Delta$ A109)	RmP978 with pTH1522 (nt 311877-313654), pTH1937 (nt 250917-251809), pTH1944	Sm Nm Gm Tc	This study
RmP991 ( $\Delta$ A116)	RmP990 with pTH1522 (nt 311877-313654), pTH1937 (nt 458916-459668), pTH1944	Sm Tc	This study
RmP939 ( $\Delta$ A117)	RmP938 with pTH1522 (nt 400267-402136), pTH1937 (nt 458916-459668)	Sm Tc	This study
RmP941 ( $\Delta$ A118)	RmP940 with pTH1522 (nt 505335-507338), pTH1937 (nt 458916-459668), pTH1944	Sm Nm Gm Tc	This study
RmP943 ( $\Delta$ A119)	RmP942 with pTH1522 (nt 505335-507338), pTH1937 (nt 575671-577241), pTH1944	Sm Tc	This study
RmP945 ( $\Delta$ A120)	RmP944 with pTH1522 (nt 623673-624863), pTH1937 (nt 575671-577241), pTH1944	Sm Nm Gm Tc	This study
RmP947 ( $\Delta$ A121)	RmP946 with pTH1522 (nt 623673-624863), pTH1937 (nt 677157-678150), pTH1944	Sm Tc	This study
RmP949 ( $\Delta$ A122)	RmP948 with pTH1522 (nt 726673-727921), pTH1937 (nt 677157-678150), pTH1944	Sm Nm Gm Tc	This study
RmP951 ( $\Delta$ A123)	RmP950 with pTH1522 (nt 726673-727921), pTH1937 (nt 774293-775476), pTH1944	Sm Tc	This study
RmP953 ( $\Delta$ A124)	RmP952 with pTH1522 (nt 828417-830143), pTH1937 (nt 774293-775476), pTH1944	Sm Nm Gm Tc	This study
RmP955 ( $\Delta$ A125)	RmP954 with pTH1522 (nt 828417-830143), pTH1937 (nt 879960-881169), pTH1944	Sm Tc	This study

RmP971 ( $\Delta$ A126)	RmP970 with pTH1522 (nt 926857-928282), pTH1937 (nt 879960-881169), pTH1944	Sm Nm Gm Tc	This study
RmP969 ( $\Delta$ A127)	RmP968 with pTH1522 (nt 930000-930910), pTH1937 (nt 879960-881169)	Sm Nm Gm Tc	This study
RmP957 ( $\Delta$ A128)	RmP956 with pTH1522 (nt 924516-927009), pTH1937 (nt 1063642-1064644), pTH1944	Sm Tc	This study
RmP959 ( $\Delta$ A129)	RmP958 with pTH1522 (nt 1122176-1123504), pTH1937 (nt 1063642-1064644), pTH1944	Sm Nm Gm Tc	This study
RmP961 ( $\Delta$ A130)	RmP960 with pTH1522 (nt 1122176-1123504), pTH1937 (nt 1173115-1173730), pTH1944	Sm Tc	This study
RmP967 ( $\Delta$ A131)	RmP966 with pTH1522 (nt 1231998-1232916), pTH1937 (nt 1173115-1173730), pTH1944	Sm Nm Gm Tc	This study
RmP965 ( $\Delta$ A132)	RmP964 with pTH1522 (nt 1231998-1232916), pTH1937 (nt 1283082-1284751), pTH1944	Sm Tc	This study
RmP963 ( $\Delta$ A133)	RmP962 with pTH1522 (nt 1348238-1349931), pTH1937 (nt 1283082-1284751), pTH1944	Sm Nm Gm Tc	This study
RmP1051 (A134)	pTH1522 (nt 90324-92124), pTH1937 (nt 1283082-1284751)	Sm Nm Gm	This study
RmP1052 (A135)	pTH1522 (nt 1348238-1349931), pTH1937 (nt 47717-48842)	Sm Nm Gm	This study
RmP1099 ( $\Delta$ A150)	RmP1094 with $\Phi$ RmP969 (nt 879960-930910) $\rightarrow$ RmP936 (nt 184519–251809), pTH1944	Sm Gm Tc	This study
RmP1408 ( $\Delta$ A152)	RmP1407 with $\Phi$ RmP959 (nt1063642-1123504) $\rightarrow$ RmP939(nt 400267–459668), pTH1944	Sm Gm Tc	This study
RmP794 ( $\Delta$ B102)	RmP727 with pTH1522 (nt 752548–753564), pTH1937 (nt 788035–788984), pTH1944	Sm Tc	This study
RmP793 ( $\Delta$ B104)	RmP726 with pTH1522 (nt 829221–830108), pTH1937 (nt 869642–870505), pTH1944	Sm Tc	This study

RmP808 (ΔB106)	RmP807 with pTH1522 (nt1091104–1092289), pTH1937 (nt 869642–870505), pTH1944	Sm Nm Gm Tc	This study
RmP791 (ΔB107)	RmP724 with pTH1522 (nt 1091104–1092289), pTH1937 (nt 1129758–1131168), pTH1944	Sm Tc	This study
RmP790 (ΔB108)	RmP723 with pTH1522 (nt 1169073–1170466), pTH1937 (nt 1129758–1131168), pTH1944	Sm Nm Gm Tc	This study
RmP799 (ΔB109)	RmP733 with pTH1522 (nt 1169073–1170466), pTH1937 (nt 1204770–1207052), pTH1944	Sm Tc	This study
RmP734 (B110)	pTH1522 (nt 1255032–1256503), pTH1937 (nt 1204770–1207052), pTH1944	Sm Nm Gm	This study
RmP823 (ΔB112)	RmP822 with pTH1522 (nt 1224621–1226491), pTH1937 (nt 1204770–1207052), pTH1944	Sm Nm Gm Tc	This study
RmP801 (ΔB116)	RmP800 with pTH1522 (nt 1255032–1256503), pTH1937 (nt 1307752–1308912), pTH1944	Sm Tc	This study
RmP809 (B117)	pTH1522 (nt 1307905–1308912), pTH1937 (nt 1528150–1529711)	Sm Nm Gm	This study
RmP811 (ΔB118)	RmP810 with pTH1522 (nt 1322226–1323078), pTH1937 (nt 1528150–1529711), pTH1944	Sm Tc	This study
RmP896 (B158)	pTH1522 (nt 1322226–1323078), pTH1937 (nt 1307752–1308912)	Sm Nm Gm	This study
RmP798 (ΔB122)	RmP732 with pTH1522 (nt 1572422–1573735), pTH1937 (nt 1528150–1529711), pTH1944	Sm Nm Gm Tc	This study
RmP806 (ΔB123)	RmP805 with pTH1522 (nt 1652558–1654191), pTH1937 (1528150–1529711), pTH1944	Sm Nm Gm Tc	This study
RmP803 (ΔB124)	RmP802 with pTH1522 (nt 1652558–1654191), pTH1937 (nt 1677882–1679723), pTH1944	Sm Tc	This study
RmP804 (B125)	pTH1522 (nt 59089–60148), pTH1937 (nt 1677882–1679723)	Sm Nm Gm	This study

RmP1055 ( $\Delta$ B161)	RmP1054 with pTH1522 (nt 1677882–1679723), pTH1937 (nt 49523–51610), pTH1944	Sm Tc	This study
RmP899 (B140)	pTH1522 (nt 64141–65620), pTH1937 (nt 466499–467160)	Sm Nm Gm	This study
RmP876 ( $\Delta$ B141)	RmP875 with pTH1522 (nt 100636–101396), pTH1937 (nt 466499–467160), pTH1944	Sm Tc	This study
RmP3181 ( $\Delta$ B163)	RmP3180 with pTH1522 (nt 466499–467007), pTH1937 (nt 635019–635940), pTH1944	Sm Nm Gm Tc	This study
RmP880 ( $\Delta$ B146)	RmP879 with pTH1522 (nt 752548–755260), pTH1937 (nt 635019–635940), pTH1944	Sm Nm Gm Tc	This study
RmP884 ( $\Delta$ B148)	RmP883 with pTH1522 (nt 762942–764540), pTH1937 (nt 635019–635940), pTH1944	Sm Nm Gm Tc	This study
RmP2746 ( $\Delta$ B180)	RmP2714 with pTH1522 (nt 220005–221266), pTH1937 (nt 100636–101396) → (RmP1108 with pTH1522 (nt 678812–679659), pTH1937 (nt 635019–635940) → RmP874)	Sm Sp Nm Tc	This study
RmP874 ( $\Delta$ B139)	RmP873 with pTH1522 (nt 869642–870505), pTH1937 (nt 739934–740722), pTH1944	Sm Nm Gm Tc	This study
RmP869 ( $\Delta$ B136)	RmP868 with pTH1522 (nt 762942–764540), pTH1937 (nt 869642–870505), pTH1944	Sm Tc	This study
RmP867 ( $\Delta$ B135)	RmP866 with pTH1522 (nt 769971–771070), pTH1937 (nt 869642–870505), pTH1944	Sm Tc	This study
RmP2371	RmP110 (pTH2623)	Sm Sp	This study
RmP2372	RmP110 (pTH2625)	Sm Sp	This study
RmP2380	RmP110 (pTH2624)	Sm Sp	This study

RmP2381	RmP110 (pTH1931)	Sm Sp	This study
RmP2374	RmP110 (pTH2647)	Sm Sp	This study
RmP2373	RmP110 (pTH2646)	Sm Sp	This study
RmP2370	RmP110 (pTH2622)	Sm Sp	This study
RmP2451	RmP110 (pTH2563)	Sm Sp	This study
RmP2908	RmP110 (pTH2790)	Sm Sp	This study
RmP3142	RmP110 (pTH2830)	Sm Sp	This study
RmFL4094	pTH1522 (nt1231998 -1232916)	Sm Gm	Cowie <i>et al.</i> (2006)
RmP2141	RmP1969 with pTH1522 (nt 276987-264696), pTH1937 (nt 254828-255655), pTH2563	Sm Nm Gm Sp	This study
RmP2195	RmP1969 with pTH1522 (nt 276987-264696), pTH1937 (nt 254828-255655), pTH1931	Sm Nm Gm Sp	This study
RmP2200	RmP956 with pTH1522 (nt 924516-927009), pTH1937 (nt 1063642-1064644), pTH2563	Sm Nm Gm Sp	This study
RmP2143	RmP926 with pTH1522 (nt 9549-10988), pTH1937 (nt 1283082-1284751), pTH2563	Sm Nm Gm Sp	This study
RmP3178	RmP896 with pTH1522 (nt 1322226–1323078), pTH1937 (nt1307752–1308912), pTH2563	Sm Nm Gm Sp	This study

RmP2352	RmP966 with pTH1522 (nt 1231998-1232916), pTH1937 (nt 1173115-1173730), pTH2646	Sm Nm Gm Sp	This study
RmP3179	RmP966 with pTH1522 (nt 1231998-1232916), pTH1937 (nt 1173115-1173730), pTH1931	Sm Nm Gm Sp	This study
RmP2494	RmP926 with pTH1522 (nt 9549-10988), pTH1937 (1283082-1284751), pTH2646	Sm Nm Gm Sp	This study
RmP2495	RmP956 with pTH1522 (nt 924516-927009), pTH1937 (nt 1063642-1064644), pTH2646	Sm Nm Gm Sp	This study
RmP2496	RmP896 with pTH1522 (nt1322226–1323078), pTH1937 (nt 1307752–1308912), pTH2646	Sm Nm Gm Sp	This study
RmP2619	RmP2500 with pTH1522 (nt 1283082-1284751), pTH1937 (nt 1231998-1232916), pTH2623	Sm Nm Gm Sp	This study
RmP2620	RmP2500 with pTH1522 (nt 1283082-1284751), pTH1937 (nt 1231998-1232916), pTH1931	Sm Nm Gm Sp	This study
RmP2659	RmP926 with pTH1522 (nt 9549-10988), pTH1937 (nt 1283082-1284751), pTH2623	Sm Nm Gm Sp	This study
RmP2660	RmP956 with pTH1522 (nt 924516-927009), pTH1937 (nt 1063642-1064644), pTH2623	Sm Nm Gm Sp	This study
RmP2661	RmP896 with pTH1522 (nt1322226–1323078), pTH1937 (nt1307752 – 1308912), pTH2623	Sm Nm Gm Sp	This study
RmP3116	RmP2695 with pTH1522 (nt 869642–870505), pTH1937 (nt 739934 – 740722), pTH2830	Sm Nm Gm Sp	This study
RmP3143	RmP2695 with pTH1522 (nt 869642–870505), pTH1937 (nt 739934 – 740722), pTH1931	Sm Nm Gm Sp	This study
RmP3169	RmP896 with pTH1522 (nt1322226–1323078), pTH1937 (nt 1307752–1308912), pTH2830	Sm Nm Gm Sp	This study
RmP3171	RmP926 with pTH1522 (nt 9549-10988), pTH1937 (nt 1283082-1284751), pTH2830	Sm Nm Gm Sp	This study

RmP3173	RmP956 with pTH1522 (nt 924516-927009), pTH1937 (nt 1063642-1064644), pTH2830	Sm Nm Gm Sp	This study
Plasmids			
pMS101	vector containing FRT site within multiple cloning site	Cm	Snaith 1995
pTH472	<i>flp</i> delivery vector derivative of pMP220	Gm	Chain & Finan unpub
pTH1360	pUC119 derivative with <i>oriT</i> from RP4 and <i>gusA</i> from pFus1	Ap Nm	Finan & Zaheer, unpublished
pTH1522	reporter vector containing FRT site	Gm	Cowie <i>et al.</i> (2006)
pTH1919	pBBR MCS-3 derivative with RK2- <i>tetR-tetA</i>	Tc	Cheng & Finan unpub
pTH1931	expression vector pTrcSC derivative of pTrcStrep	Sm Sp	C. Baron, unpublished
pTH1937	$\Delta$ Tn903 inverted repeats, pRK2 <i>oriT</i> , <i>nptII</i> from Tn5	Km Nm	This study
pTH1944	<i>flp</i> gene in a pBBR MCS-3 derivative with RK2- <i>tetR-tetA</i>	Tc	This study
pTH1998	pACYC177 derivative with <i>EcoRI/SphI</i> fragment containing MCS	Km Nm	This study
pTH1999	pTH1998 with <i>SphI/BglII</i> fragment from pMS101 containing FRT site	Km Nm	This study



pTH2000	$\Delta$ Tn903 inverted repeats in pTH1999	Km Nm	This study
pTH2001	pTH2000 with <i>NcoI/NheI</i> fragment from pTH1360 containing the <i>oriT</i> site from pRK2	Km Nm	This study
pTH2563	pTH1931 with <i>PacI</i> fragment of <i>sma0471/sma0473</i> (nt 257565 - 258837)	Sm Sp	This study
pTH2622	pTH1931 with <i>PacI</i> fragment of <i>sma2151</i> (nt 1214806 - 1215645)	Sm Sp	This study
pTH2623	pTH1931 with <i>PacI</i> fragment of <i>sma2231</i> (nt 1248755 - 1249733)	Sm Sp	This study
pTH2624	pTH1931 with <i>PacI</i> fragment of <i>sma2253/sma2255</i> (nt 1262710 - 1264012)	Sm Sp	This study
pTH2625	pTH1931 with <i>PacI</i> fragment of <i>sma2273/sma2275</i> (nt 1269637 - 1268234)	Sm Sp	This study
pTH2646	pTH1931 with <i>PacI</i> fragment of <i>sma2105</i> (nt 1187240 - 1189099)	Sm Sp	This study
pTH2647	pTH1931 with <i>PacI</i> fragment of <i>sma2133</i> (nt 1205426 - 1206839)	Sm Sp	This study
pTH2790	pTH1931 with <i>PacI</i> fragment of (nt 1187240 – 1187703)	Sm Sp	This study
pTH2830	pTH1931 with <i>PacI</i> fragment of (nt 766418 - 767440)	Sm Sp	This study

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**Supplemental Table 2:** Primers employed for amplification of TA genes

Plasmid name	Gene	Primer name and sequence	Primers location on pSymB	PCR prod. size
pTH2563	<i>sma0471/</i>	TApacF CCTTAATTAACAACCTGTCCACCGCGCTTCG	257565nt	1272bp
	<i>sma0473</i>	TApacR CCTTAATTAAGAGTGAGGCTGCTTCTACCC	258837nt	
pTH2622	<i>sma2151</i>	sma2151F CCTTAATTAACCGGAGATGATTGCCAA	1214806nt	839bp
		sma2151R CCTTAATTAATCCTTCTGCGGCAGTGTCC	1215645nt	
pTH2623	<i>sma2231</i>	sma2231F CCTTAATTAACGCTCTATCCGGTCTGA	1248755nt	978bp
		sma2231R CCTTAATTAAGCAAGAGCAACGGCCATGG	1249733nt	
pTH2624	<i>sma2253/</i>	sma53/5F CCTTAATTAATCGCGCTGCACAAACAA	1262710nt	1303bp
	<i>sma2255</i>	sma53/5R CCTTAATTAACATCGCGGCAGCCTGTCTTCG	1264012nt	
pTH2625	<i>sma2273/</i>	sma73/5F CCCAAGCTTGAAAGCACAACCTGGACGCGG	1269637nt	1403bp
	<i>sma2275</i>	sma73/5R CCTTAATTAAGTCCTGGTCGTCACCATCC	1268234nt	
pTH2646	<i>sma2105</i>	sma105F CCTTAATTAACAGCATCGTGCCCT	1187240nt	1859bp
		sma105R CCTTAATTAACGTTTCGTTGACCTCCTA	1189099nt	
pTH2647	<i>sma2133</i>	sma133F CCTTAATTAAGGCAAGGATGCGGAAG	1206839nt	1414bp
		sma133R CCTTAATTAATCGGGTCGATGTGACT	1205425nt	
pTH2790	Upstream region of	105PF CCTTAATTAACAGCATCGTGCCCTTGGC	1187240nt	463bp

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<i>Sma2105</i>	105PR	CCCAAGCTTGTCCAGTTAATAAATGAAAT-	1187703nt
		CCCG	

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**Supplemental Table 3:** RNA-sequence read count data for the TA-associated genes from *S. meliloti*. The sequence read count data were obtained from *S. meliloti* P110 cells grown in MOPS minimal medium with limiting (20  $\mu$ M, P0) and excess (2 mM, P2) phosphate and from data extracted from Sallet *et al.*, 2013. These data were combined and the resulting cumulative values were used to determine the rank orders as shown in Figure 7. The *S. meliloti* TA-associated genes were from Makarova *et al.*, 2009.

Gene	Toxin/ Antitoxin Class	Length	start	end	MOPS		per site Sallet et al 2013									cumulat. value
					P0	P2	ExpL DESEQ	Stat DESEQ	ExpL DESEQ	Stat DESEQ Q	NodL DESEQ Q	N- ShortD Q	E- Short DQ	S- ShortDQ		
SMc01110	Xre	139 aa	445435	445854	2.384	1.580	0.602	1.293	0.602	1.293	1.367	0.883	0.293	0.307	10.605	
SMc04312	RHH	94 aa	2E+06	2E+06	1.066	0.777	0.379	0.994	0.379	0.994	0.339	0.819	0.484	1.929	8.160	
SMa1413	RHH	91 aa	777118	777393	0.563	0.296	0.321	1.544	0.321	1.544	0.110	0.503	0.437	1.109	6.747	
SMB20696	COG5642	161 aa	1E+06	1E+06	0.665	0.558	0.319	1.119	0.319	1.119	0.291	0.346	0.616	1.261	6.613	
SMa5007	Xre	126 aa	550344	550724	1.112	0.453	0.353	1.504	0.353	1.504	0.186	0.150	0.250	0.448	6.313	
SMc01857	AbrB	146 aa	2E+06	2E+06	0.323	0.296	0.539	0.720	0.539	0.720	0.881	1.190	0.802	0.275	6.286	
SMc05009	ArsR	123 aa	3E+06	3E+06	2.282	1.267	0.082	0.467	0.082	0.467	0.000	0.048	0.215	0.579	5.490	
SMc02461	RelE	98 aa	1E+06	1E+06	0.104	0.155	0.094	0.886	0.094	0.886	0.150	0.534	0.279	1.733	4.914	
SMc01452	RHH	80 aa	2E+06	2E+06	0.152	0.288	0.160	0.116	0.160	0.116	1.598	1.866	0.374	0.077	4.907	
SMc00178	RelE	196 aa	2E+06	2E+06	0.733	0.375	0.276	0.665	0.276	0.665	0.107	0.575	0.409	0.644	4.723	
SMc00080	ArsR	227 aa	1E+06	1E+06	0.059	0.039	0.079	0.581	0.079	0.581	0.459	1.508	0.143	0.587	4.114	
SMB21117	Xre	152 aa	758135	758593	0.925	0.522	0.053	0.306	0.053	0.306	0.155	0.259	0.322	1.196	4.099	
SMc00348	RHH	91 aa	303335	303610	0.156	0.543	0.246	0.229	0.246	0.229	0.954	1.059	0.172	0.143	3.976	
SMc04408	AbrB	86 aa	4E+06	4E+06	0.303	0.306	0.087	0.654	0.087	0.654	0.290	0.690	0.196	0.190	3.456	
SMa0471	RHH	102 aa	258225	258533	0.244	0.168	0.216	0.717	0.216	0.717	0.289	0.314	0.145	0.155	3.179	

SMc01269	Xre	132 aa	2E+06	2E+06	1.296	0.716	0.255	0.128	0.255	0.128	0.035	0.038	0.121	0.024	2.995
SMc01933	RHH	71 aa	1E+06	1E+06	0.233	0.126	0.209	0.637	0.209	0.637	0.088	0.143	0.256	0.292	2.831
SMa0473	RelE	97 aa	258530	258823	0.190	0.210	0.175	0.252	0.175	0.252	0.346	1.013	0.097	0.113	2.823
SMc02716	RHH	83 aa	3E+06	3E+06	0.281	0.290	0.346	0.454	0.346	0.454	0.091	0.219	0.160	0.127	2.767
SMc02394	Xre	102 aa	1E+06	1E+06	0.096	0.063	0.095	0.876	0.095	0.876	0.160	0.300	0.052	0.137	2.750
SMa1456	COG5642	129 aa	802839	803228	0.126	0.108	0.125	0.600	0.125	0.600	0.254	0.478	0.134	0.195	2.745
SMc04881	PIN	134 aa	4E+06	4E+06	0.426	0.249	0.087	0.464	0.087	0.464	0.449	0.330	0.069	0.068	2.691
SMB20628	RHH	89 aa	2E+06	2E+06	0.266	0.290	0.118	0.467	0.118	0.467	0.036	0.263	0.139	0.488	2.652
SMa2255	PHD	112 aa	1E+06	1E+06	0.245	0.262	0.133	0.389	0.133	0.389	0.116	0.164	0.312	0.490	2.634
SMc04198	Xre	229 aa	2E+06	2E+06	0.177	0.290	0.250	0.233	0.250	0.233	0.011	0.093	0.466	0.571	2.575
SMa2275	RHH	91 aa	1E+06	1E+06	0.158	0.094	0.084	0.277	0.084	0.277	0.059	0.467	0.317	0.729	2.547
SMc04431	COG2929	87 aa	684058	684321	0.218	0.297	0.067	0.321	0.067	0.321	0.041	0.325	0.164	0.688	2.509
SMc01226	ArsR	96 aa	2E+06	2E+06	0.042	0.036	0.017	0.043	0.017	0.043	0.939	1.164	0.065	0.130	2.497
SMa1990	RHH	118 aa	1E+06	1E+06	0.267	0.190	0.128	0.592	0.128	0.592	0.015	0.130	0.221	0.180	2.444
SMc02477	Xre	88 aa	3E+06	3E+06	0.165	0.375	0.190	0.559	0.190	0.559	0.057	0.072	0.162	0.074	2.403
SMc00822	RelE	98 aa	843615	843911	0.339	0.213	0.093	0.250	0.093	0.250	0.172	0.381	0.278	0.306	2.375
SMc01932	PIN	121 aa	1E+06	1E+06	0.182	0.119	0.204	0.524	0.204	0.524	0.101	0.196	0.145	0.098	2.297
SMc01132	COG3832	152 aa	417338	417796	0.197	0.087	0.118	0.729	0.118	0.729	0.018	0.098	0.077	0.123	2.294
SMc03949	AbrB	90 aa	3E+06	3E+06	0.203	0.149	0.091	0.372	0.091	0.372	0.012	0.740	0.070	0.176	2.277
SMa2231	PIN	127 aa	1E+06	1E+06	0.006	0.013	0.172	0.350	0.172	0.350	0.244	0.489	0.206	0.238	2.240
SMc00687	PIN	132 aa	3E+06	3E+06	0.291	0.128	0.219	0.437	0.219	0.437	0.097	0.169	0.111	0.073	2.182
SMc01957	Xre	104 aa	3E+06	3E+06	0.199	0.105	0.048	0.185	0.048	0.185	0.629	0.550	0.089	0.050	2.086
SMa1924	Xre	224 aa	1E+06	1E+06	0.119	0.138	0.083	0.306	0.083	0.306	0.446	0.375	0.111	0.107	2.072
SMc02988	RHH	79 aa	3E+06	3E+06	0.162	0.104	0.151	0.336	0.151	0.336	0.078	0.178	0.195	0.356	2.046

SMc02151	Xre	110 aa	560247	560579	0.283	0.405	0.384	0.146	0.384	0.146	0.005	0.062	0.119	0.009	1.942
SMB20412	PIN	54 aa	426973	427137	0.149	0.110	0.052	0.233	0.052	0.233	0.075	0.614	0.106	0.317	1.939
SMc00823	Xre	131 aa	843911	844306	0.308	0.160	0.076	0.419	0.076	0.419	0.158	0.093	0.058	0.155	1.921
SMB20627	RelE	112 aa	2E+06	2E+06	0.186	0.163	0.119	0.298	0.119	0.298	0.034	0.260	0.205	0.216	1.899
SMA2253	PIN	125 aa	1E+06	1E+06	0.233	0.223	0.086	0.371	0.086	0.371	0.080	0.289	0.067	0.069	1.875
SMc03842	COG3832	119 aa	4E+06	4E+06	0.111	0.209	0.034	0.034	0.034	0.034	0.326	0.738	0.146	0.193	1.858
SMc03998	ArsR	86 aa	3E+06	3E+06	0.338	0.136	0.181	0.037	0.181	0.037	0.009	0.286	0.593	0.057	1.855
SMc02476	RelE	92 aa	3E+06	3E+06	0.143	0.221	0.087	0.227	0.087	0.227	0.000	0.140	0.325	0.337	1.796
SMc01176	AbrB	76 aa	2E+06	2E+06	0.359	0.207	0.108	0.193	0.108	0.193	0.023	0.188	0.196	0.158	1.732
SMB20935	Xre	83 aa	1E+06	1E+06	0.607	0.694	0.083	0.015	0.083	0.015	0.068	0.078	0.049	0.014	1.706
SMB20413	RHH	75 aa	427134	427361	0.203	0.083	0.081	0.455	0.081	0.455	0.054	0.012	0.129	0.147	1.699
SMA0572	RelE	107 aa	304557	304880	0.219	0.258	0.074	0.104	0.074	0.104	0.321	0.357	0.097	0.074	1.680
SMc01995	RelE	128 aa	3E+06	3E+06	0.064	0.080	0.052	0.189	0.052	0.189	0.274	0.459	0.090	0.199	1.651
SMc00740	RHH	94 aa	3E+06	3E+06	0.191	0.122	0.025	0.142	0.025	0.142	0.313	0.535	0.057	0.098	1.648
SMB20062	RHH	82 aa	72518	72766	0.136	0.097	0.095	0.321	0.095	0.321	0.042	0.275	0.120	0.144	1.646
SMc04162	ArsR	109 aa	2E+06	2E+06	0.134	0.078	0.062	0.144	0.062	0.144	0.071	0.376	0.228	0.321	1.620
SMB20063	RelE	98 aa	72756	73052	0.166	0.086	0.119	0.246	0.119	0.246	0.051	0.268	0.158	0.141	1.601
SMc04432	RHH	105 aa	684318	684635	0.142	0.095	0.063	0.332	0.063	0.332	0.064	0.369	0.035	0.054	1.549
SMB21008	ArsR	110 aa	1E+06	1E+06	0.564	0.330	0.086	0.142	0.086	0.142	0.015	0.024	0.057	0.065	1.511
SMc03206	COG3832	217 aa	3E+06	3E+06	0.031	0.025	0.023	0.400	0.023	0.400	0.013	0.031	0.031	0.487	1.465
SMc02715	PIN	142 aa	3E+06	3E+06	0.146	0.170	0.128	0.222	0.128	0.222	0.100	0.221	0.068	0.035	1.439
SMA0981	PIN	139 aa	546465	546884	0.086	0.117	0.124	0.237	0.124	0.237	0.096	0.164	0.094	0.156	1.435
SMc03151	Xre	232 aa	3E+06	3E+06	0.144	0.274	0.233	0.044	0.233	0.044	0.040	0.186	0.143	0.082	1.422
SMB21169	ArsR	141 aa	916402	916827	0.111	0.096	0.021	0.105	0.021	0.105	0.334	0.448	0.070	0.069	1.378

SMa1076	Xre	194 aa	587855	588439	0.298	0.417	0.081	0.057	0.081	0.057	0.050	0.106	0.164	0.062	1.375
SMc00900	PIN	128 aa	882944	883330	0.159	0.090	0.060	0.126	0.060	0.126	0.079	0.396	0.125	0.133	1.355
SMc01836	Xre	105 aa	3E+06	3E+06	0.106	0.088	0.072	0.223	0.072	0.223	0.208	0.192	0.082	0.072	1.339
SMa0193	ArsR	108 aa	106326	106652	0.185	0.320	0.009	0.026	0.009	0.026	0.046	0.328	0.084	0.255	1.289
SMc00899	RHH	84 aa	883330	883584	0.189	0.112	0.039	0.093	0.039	0.093	0.151	0.327	0.095	0.142	1.280
SMc02982	PIN	196 aa	3E+06	3E+06	0.024	0.069	0.334	0.010	0.334	0.010	0.037	0.054	0.333	0.017	1.223
SMc01521	PIN	134 aa	3E+06	3E+06	0.099	0.069	0.074	0.237	0.074	0.237	0.023	0.091	0.092	0.216	1.213
SMc00392	PHD	80 aa	343262	343504	0.127	0.214	0.113	0.134	0.113	0.134	0.048	0.028	0.191	0.096	1.198
SMc04222	RHH	96 aa	2E+06	2E+06	0.155	0.088	0.068	0.161	0.068	0.161	0.096	0.158	0.101	0.130	1.188
SMc02888	Xre	340 aa	243152	244174	0.012	0.012	0.073	0.404	0.073	0.404	0.020	0.029	0.048	0.084	1.159
SMa5006	PIN	119 aa	510778	511137	0.171	0.132	0.088	0.108	0.088	0.108	0.194	0.088	0.062	0.119	1.157
SMB21007	COG3832	139 aa	1E+06	1E+06	0.217	0.093	0.086	0.199	0.086	0.199	0.067	0.045	0.087	0.054	1.132
SMa0548	RHH	79 aa	291638	291877	0.222	0.207	0.165	0.064	0.165	0.064	0.008	0.120	0.102	0.014	1.132
SMc00075	GNAT	203aa	1E+06	1E+06	0.119	0.091	0.050	0.039	0.050	0.039	0.039	0.345	0.217	0.135	1.123
SMc03843	ArsR	104 aa	4E+06	4E+06	0.264	0.218	0.025	0.049	0.025	0.049	0.135	0.253	0.033	0.057	1.106
SMc01842	ArsR	340 aa	3E+06	3E+06	0.124	0.095	0.161	0.153	0.161	0.153	0.015	0.039	0.163	0.040	1.105
SMc01762	Xre	111 aa	1E+06	1E+06	0.156	0.222	0.149	0.044	0.149	0.044	0.103	0.035	0.167	0.028	1.098
SMB21651	PIN	137 aa	2E+06	2E+06	0.035	0.047	0.058	0.054	0.058	0.054	0.086	0.568	0.059	0.055	1.075
SMc02639	ArsR	110 aa	1E+06	1E+06	0.031	0.066	0.032	0.027	0.032	0.027	0.050	0.658	0.047	0.042	1.012
SMc02313	HicB	118 aa	684838	685194	0.063	0.055	0.054	0.166	0.054	0.166	0.099	0.161	0.142	0.047	1.006
SMc00479	Xre	338 aa	2E+06	2E+06	0.152	0.040	0.088	0.194	0.088	0.194	0.079	0.038	0.063	0.065	1.001
SMB21127	COG5642	123 aa	766495	766866	0.047	0.095	0.172	0.080	0.172	0.080	0.070	0.115	0.096	0.074	1.000
SMc04169	ArsR	334 aa	2E+06	2E+06	0.620	0.178	0.052	0.020	0.052	0.020	0.000	0.017	0.030	0.006	0.994
SMa2273	RelE	116 aa	1E+06	1E+06	0.067	0.045	0.064	0.138	0.064	0.138	0.055	0.211	0.097	0.101	0.980

SMa0967	HEPN	306 aa	539831	540751	0.320	0.254	0.060	0.061	0.060	0.061	0.010	0.029	0.084	0.028	0.968
SMc00686	AbrB	77 aa	3E+06	3E+06	0.092	0.064	0.081	0.183	0.081	0.183	0.033	0.082	0.100	0.054	0.954
SMc02620	Xre	243 aa	111802	112533	0.064	0.135	0.135	0.159	0.135	0.159	0.011	0.032	0.059	0.044	0.933
SMc02638	ArsR	160 aa	1E+06	1E+06	0.040	0.051	0.033	0.189	0.033	0.189	0.158	0.142	0.035	0.035	0.907
S Mb20695	COG5654	168 aa	1E+06	1E+06	0.091	0.074	0.056	0.114	0.056	0.114	0.084	0.170	0.085	0.057	0.902
S Mb21035	Xre	72 aa	653580	653798	0.258	0.251	0.095	0.071	0.095	0.071	0.000	0.017	0.032	0.011	0.901
SMc00694	RelE	100 aa	3E+06	3E+06	0.061	0.052	0.015	0.038	0.015	0.038	0.036	0.564	0.018	0.056	0.893
SMc00693	RHH	91 aa	3E+06	3E+06	0.093	0.063	0.053	0.156	0.053	0.156	0.009	0.120	0.107	0.065	0.875
SMc00407	COG3832	230 aa	358400	359092	0.077	0.298	0.092	0.029	0.092	0.029	0.069	0.079	0.091	0.015	0.869
SMa0453	PIN	135 aa	243155	243562	0.040	0.052	0.044	0.095	0.044	0.095	0.235	0.202	0.033	0.021	0.861
SMc04221	GNAT	174 aa	2E+06	2E+06	0.088	0.059	0.064	0.107	0.064	0.107	0.074	0.145	0.065	0.059	0.830
SMa0191	COG3832	176 aa	105799	106329	0.120	0.278	0.020	0.075	0.020	0.075	0.059	0.121	0.018	0.016	0.801
SMc05006	AbrB	104 aa	2E+06	2E+06	0.078	0.258	0.143	0.003	0.143	0.003	0.000	0.029	0.135	0.001	0.794
SMc02757	HipA	504 aa	41974	43488	0.072	0.122	0.048	0.073	0.048	0.073	0.095	0.130	0.078	0.053	0.792
S Mb20626	Xre	328 aa	2E+06	2E+06	0.030	0.031	0.017	0.044	0.017	0.044	0.160	0.324	0.052	0.052	0.769
SMc03136	PHD	81 aa	3E+06	3E+06	0.071	0.037	0.036	0.185	0.036	0.185	0.032	0.088	0.045	0.053	0.767
S Mb22004	RelE	130 aa	132946	133338	0.191	0.128	0.045	0.078	0.045	0.078	0.063	0.042	0.063	0.026	0.759
SMc02987	PIN	147 aa	3E+06	3E+06	0.037	0.073	0.057	0.095	0.057	0.095	0.068	0.162	0.075	0.041	0.759
SMc00397	GNAT	186 aa	346867	347427	0.011	0.016	0.014	0.084	0.014	0.084	0.052	0.166	0.027	0.288	0.755
SMc00739	GNAT	160 aa	3E+06	3E+06	0.034	0.039	0.015	0.045	0.015	0.045	0.082	0.411	0.033	0.029	0.747
SMc03137	PIN	153 aa	3E+06	3E+06	0.029	0.051	0.047	0.198	0.047	0.198	0.029	0.030	0.047	0.060	0.736
S Mb22021	GNAT	84 aa	534745	534999	0.084	0.027	0.008	0.023	0.008	0.023	0.066	0.126	0.060	0.310	0.734
S Mb20121	RHH	91 aa	133283	133558	0.178	0.068	0.025	0.111	0.025	0.111	0.033	0.089	0.039	0.045	0.727
SMa1455	COG5654	172 aa	802324	802842	0.030		0.038	0.067	0.038	0.067	0.134	0.260	0.051	0.043	0.727



SMc05001	HicB	96 aa	242774	243064	0.032	0.023	0.024	0.216	0.024	0.216	0.054	0.016	0.043	0.076	0.722
SMc04313	RelE	77 aa	2E+06	2E+06	0.022	0.052	0.029	0.010	0.029	0.010	0.033	0.251	0.096	0.185	0.716
SMB20256	COG3832	149 aa	261442	261891	0.066	0.027	0.017	0.239	0.017	0.239	0.013	0.028	0.013	0.041	0.702
SMA2151	Xre	107 aa	1E+06	1E+06	0.092	0.237	0.065	0.012	0.065	0.012	0.049	0.127	0.022	0.006	0.687
SMc01748	PHD	86 aa	3E+06	3E+06	0.069	0.051	0.042	0.050	0.042	0.050	0.069	0.073	0.115	0.123	0.684
SMc02783	Xre	125 aa	8185	8562	0.073	0.112	0.057	0.016	0.057	0.016	0.074	0.227	0.043	0.007	0.682
SMc00393	PIN	141 aa	343504	343929	0.070	0.065	0.055	0.065	0.055	0.065	0.050	0.040	0.179	0.030	0.676
SMc00605	COG3832	202 aa	1E+06	1E+06	0.126	0.115	0.036	0.053	0.036	0.053	0.061	0.062	0.057	0.074	0.675
SMc03840	GNAT	185 aa	4E+06	4E+06	0.061	0.084	0.058	0.007	0.058	0.007	0.058	0.273	0.064	0.003	0.673
SMc01177	PIN	132 aa	2E+06	2E+06	0.118	0.087	0.072	0.100	0.072	0.100	0.020	0.026	0.041	0.025	0.660
SMc02184	Xre	89 aa	546632	546901	0.057	0.087	0.066	0.071	0.066	0.071	0.012	0.030	0.138	0.051	0.650
SMB21511	PIN	81 aa	1E+06	1E+06	0.025	0.003	0.004	0.027	0.004	0.027	0.018	0.185	0.023	0.321	0.636
SMB20420	COG3832	208 aa	433992	434618	0.196	0.109	0.051	0.055	0.051	0.055	0.008	0.021	0.049	0.023	0.619
SMA5001	PIN	104 aa	58298	58612	0.020	0.019	0.005	0.006	0.005	0.006	0.000	0.047	0.117	0.374	0.599
SMA0545	PIN	146 aa	291198	291638	0.107	0.111	0.080	0.027	0.080	0.027	0.008	0.094	0.053	0.008	0.596
SMB21128	COG5654	184 aa	766873	767427	0.024	0.019	0.090	0.018	0.090	0.018	0.085	0.089	0.062	0.068	0.563
SMc01229	GNAT	169 aa	2E+06	2E+06	0.044	0.080	0.042	0.022	0.042	0.022	0.107	0.157	0.025	0.016	0.556
SMc02887	RHH	54 aa	242730	242894	0.019	0.005	0.018	0.195	0.018	0.195	0.035	0.006	0.017	0.045	0.553
SMc04441	HicA	62 aa	2E+06	2E+06	0.087	0.060	0.050	0.047	0.050	0.047	0.010	0.012	0.124	0.039	0.524
SMB21475	MazF	67 aa	1E+06	1E+06	0.015	0.111	0.054	0.001	0.054	0.001	0.000	0.023	0.240	0.016	0.515
SMB21649	Xre	313 aa	2E+06	2E+06	0.025	0.029	0.012	0.022	0.012	0.022	0.164	0.202	0.013	0.013	0.515
SMB21576	ArsR	121 aa	1E+06	1E+06	0.062	0.060	0.028	0.084	0.028	0.084	0.011	0.024	0.040	0.091	0.513
SMB20835	HEPN	331 aa	627125	628120	0.150	0.089	0.009	0.031	0.009	0.031	0.000	0.057	0.055	0.056	0.488
SMB20835	MNT	331 aa	627125	628120	0.150	0.089	0.009	0.031	0.009	0.031	0.000	0.057	0.055	0.056	0.488

SMa2105	Fic	406 aa	1E+06	1E+06	0.061	0.058	0.017	0.032	0.017	0.032	0.015	0.145	0.055	0.048	0.482
SMc04161	COG3832	156 aa	2E+06	2E+06	0.065	0.037	0.017	0.081	0.017	0.081	0.054	0.058	0.021	0.028	0.459
SMc01610	Xre	294 aa	2E+06	2E+06	0.012	0.031	0.042	0.061	0.042	0.061	0.020	0.044	0.082	0.059	0.454
SMa1749	Xre	299 aa	991460	992359	0.019	0.032	0.065	0.040	0.065	0.040	0.007	0.021	0.089	0.051	0.429
SMc02657	PIN	94 aa	1E+06	1E+06	0.054	0.106	0.053	0.008	0.053	0.008	0.000	0.024	0.117	0.005	0.428
SMa1056	ArsR	115 aa	577474	577821	0.027	0.006	0.015	0.099	0.015	0.099	0.060	0.047	0.011	0.045	0.425
SMc02226	COG3832	157 aa	587336	587809	0.076	0.111	0.059	0.030	0.059	0.030	0.011	0.009	0.020	0.013	0.418
SMc04269	HicB	153 aa	2E+06	2E+06	0.060	0.044	0.052	0.040	0.052	0.040	0.004	0.031	0.050	0.040	0.413
SMB20629	RHH	92 aa	2E+06	2E+06	0.088	0.051	0.010	0.050	0.010	0.050	0.009	0.104	0.026	0.015	0.411
SMc00036	COG3832	206 aa	1E+06	1E+06	0.079	0.082	0.047	0.019	0.047	0.019	0.003	0.027	0.051	0.010	0.385
SMB20754	COG2856	491 aa	2E+06	2E+06	0.013	0.018	0.018	0.051	0.018	0.051	0.008	0.022	0.036	0.132	0.367
SMB20754	Xre	491 aa	2E+06	2E+06	0.013	0.018	0.018	0.051	0.018	0.051	0.008	0.022	0.036	0.132	0.367
SMa1497	COG3832	215 aa	825906	826553	0.063	0.049	0.020	0.014	0.020	0.014	0.078	0.074	0.021	0.008	0.360
SMc02223	Xre	218 aa	584615	585271	0.042	0.049	0.029	0.018	0.029	0.018	0.043	0.063	0.057	0.010	0.359
SMc02658	AbrB	77 aa	1E+06	1E+06	0.035	0.035	0.040	0.012	0.040	0.012	0.010	0.074	0.080	0.007	0.344
SMc04220	ArsR	105 aa	2E+06	2E+06	0.010	0.012	0.021	0.017	0.021	0.017	0.036	0.132	0.048	0.014	0.328
SMc01636	PHD	323 aa	2E+06	2E+06	0.012	0.018	0.009	0.025	0.009	0.025	0.036	0.138	0.027	0.029	0.327
SMB20608	ArsR	112 aa	2E+06	2E+06	0.151	0.082	0.013	0.024	0.013	0.024	0.000	0.003	0.011	0.003	0.324
SMB21187	Xre	276 aa	936834	937664	0.044	0.027	0.033	0.030	0.033	0.030	0.022	0.030	0.051	0.014	0.314
SMc00429	Xre	269 aa	377524	378333	0.024	0.021	0.025	0.046	0.025	0.046	0.008	0.026	0.048	0.041	0.309
SMB20411	PIN	82 aa	426694	426942	0.004	0.009	0.010	0.017	0.010	0.017	0.010	0.080	0.023	0.129	0.308
SMa0592	HipA	390 aa	315280	316452	0.029	0.048	0.019	0.038	0.019	0.038	0.018	0.050	0.018	0.024	0.301
SMB20607	COG3832	154 aa	2E+06	2E+06	0.049	0.044	0.023	0.052	0.023	0.052	0.007	0.019	0.016	0.012	0.296
SMB21419	Xre	295 aa	1E+06	1E+06	0.073	0.023	0.014	0.023	0.014	0.023	0.043	0.032	0.019	0.020	0.283

SMa1822	Xre	303 aa	1E+06	1E+06	0.151	0.017	0.015	0.010	0.015	0.010	0.008	0.018	0.024	0.009	0.277
SMc00097	COG3832	219 aa	1E+06	1E+06	0.023	0.041	0.034	0.020	0.034	0.020	0.037	0.016	0.035	0.005	0.267
SMa0594	Xre	343 aa	316428	317459	0.034	0.030	0.024	0.034	0.024	0.034	0.016	0.020	0.019	0.027	0.262
SMB21559	Xre	296 aa	1E+06	1E+06	0.074	0.021	0.013	0.018	0.013	0.018	0.015	0.043	0.014	0.021	0.249
SMB21153	GNAT	166 aa	898009	898509	0.045	0.023	0.016	0.030	0.016	0.030	0.021	0.037	0.016	0.012	0.246
SMc04387	Xre	182 aa	4E+06	4E+06	0.021	0.038	0.026	0.012	0.026	0.012	0.017	0.020	0.048	0.023	0.244
SMc02609	Xre	324 aa	102517	103491	0.031	0.020	0.046	0.028	0.046	0.028	0.002	0.015	0.017	0.007	0.239
SMB20215	Xre	326 aa	222993	223973	0.024	0.018	0.021	0.027	0.021	0.027	0.012	0.020	0.023	0.023	0.216
SMa2319	COG3832	215 aa	1E+06	1E+06	0.010	0.003	0.009	0.027	0.009	0.027	0.002	0.032	0.029	0.067	0.216
SMc02647	ArsR	137 aa	1E+06	1E+06	0.025	0.015	0.014	0.011	0.014	0.011	0.017	0.085	0.015	0.009	0.215
SMa1725	Xre	331 aa	972775	973770	0.033	0.023	0.016	0.028	0.016	0.028	0.005	0.015	0.024	0.024	0.214
SMc04321	COG3832	224 aa	2E+06	2E+06	0.064	0.026	0.006	0.025	0.006	0.025	0.023	0.013	0.011	0.014	0.213
SMa1825	Xre	302 aa	1E+06	1E+06	0.046	0.029	0.011	0.008	0.011	0.008	0.028	0.028	0.025	0.014	0.208
SMa2315	MNT	179 aa	1E+06	1E+06	0.027	0.038	0.010	0.035	0.010	0.035	0.008	0.023	0.013	0.008	0.206
SMc01149	COG3832	160 aa	402694	403176	0.021	0.014	0.009	0.052	0.009	0.052	0.016	0.006	0.008	0.013	0.200
SMa2133	Xre	263 aa	1E+06	1E+06	0.045	0.027	0.009	0.023	0.009	0.023	0.010	0.019	0.014	0.019	0.197
SMc00383	COG3832	228 aa	337026	337712	0.015	0.039	0.032	0.018	0.032	0.018	0.007	0.018	0.014	0.002	0.195
SMc00351	Xre	197 aa	306948	307541	0.016	0.034	0.016	0.012	0.016	0.012	0.011	0.004	0.050	0.014	0.184
SMa1823	Xre	302 aa	1E+06	1E+06	0.050	0.041	0.006	0.006	0.006	0.006	0.006	0.019	0.025	0.010	0.175
SMc02865	GNAT	156 aa	218732	219202	0.009	0.026	0.016	0.004	0.016	0.004	0.022	0.044	0.028	0.002	0.171
SMa1476	Xre	318 aa	811255	812211	0.029	0.015	0.016	0.008	0.016	0.008	0.014	0.015	0.030	0.016	0.166
SMa0286	COG2442	153 aa	159590	160051	0.022	0.018	0.023	0.011	0.023	0.011	0.000	0.012	0.034	0.003	0.156
SMa1253	MNT	89 aa	686450	686719	0.015	0.000	0.004	0.006	0.004	0.006	0.016	0.061	0.022	0.015	0.148
SMc00558	Xre	285 aa	1E+06	1E+06	0.017	0.011	0.004	0.019	0.004	0.019	0.000	0.022	0.021	0.027	0.145

SMc00089	Xre	118 aa	1E+06	1E+06	0.011	0.034	0.007	0.015	0.007	0.015	0.025	0.004	0.014	0.009	0.142
SMc03170	Xre	279 aa	3E+06	3E+06	0.029	0.013	0.012	0.005	0.012	0.005	0.002	0.035	0.014	0.013	0.141
SMc00769	COG2856	470 aa	781497	782909	0.006	0.010	0.008	0.028	0.008	0.028	0.009	0.012	0.014	0.010	0.132
SMc00769	Xre	470 aa	781497	782909	0.006	0.010	0.008	0.028	0.008	0.028	0.009	0.012	0.014	0.010	0.132
SMa5008	RelE	73 aa	750238	750459	0.005	0.010	0.013	0.002	0.013	0.002	0.026	0.027	0.018	0.008	0.122
SMc00352	GNAT	175 aa	307543	308070	0.014	0.019	0.011	0.007	0.011	0.007	0.000	0.014	0.032	0.003	0.116
SMB21509	RHH	170 aa	1E+06	1E+06	0.020	0.004	0.005	0.010	0.005	0.010	0.000	0.017	0.016	0.027	0.115
SMc01238	COG3832	212 aa	2E+06	2E+06	0.022	0.013	0.013	0.006	0.013	0.006	0.014	0.019	0.004	0.002	0.112
SMa2163	Xre	293 aa	1E+06	1E+06	0.005	0.009	0.007	0.009	0.007	0.009	0.008	0.014	0.021	0.023	0.112
SMa2279	COG5654	160 aa	1E+06	1E+06	0.011	0.008	0.005	0.004	0.005	0.004	0.000	0.000	0.024	0.051	0.111
SMB21476	MazF	115 aa	1E+06	1E+06	0.016	0.006	0.009	0.004	0.009	0.004	0.009	0.011	0.013	0.016	0.098
SMc01462	GNAT	153 aa	2E+06	2E+06	0.031	0.005	0.001	0.002	0.001	0.002	0.005	0.031	0.015	0.004	0.097
SMa0285	PIN	74 aa	159165	159389	0.000	0.027	0.009	0.004	0.009	0.004	0.000	0.023	0.006	0.004	0.085
SMc00377	Xre	263 aa	330891	331682	0.013	0.013	0.006	0.002	0.006	0.002	0.006	0.001	0.030	0.003	0.083
SMB21510	PIN	41 aa	1E+06	1E+06	0.016	0.012	0.005	0.012	0.005	0.012	0.000	0.008	0.006	0.005	0.082
SMc04436	RelE	92 aa	2E+06	2E+06	0.004	0.019	0.006	0.001	0.006	0.001	0.018	0.000	0.012	0.010	0.077
SMc02710	Fic	302 aa	3E+06	3E+06	0.005	0.004	0.002	0.003	0.002	0.003	0.021	0.027	0.003	0.003	0.072
SMB20005	COG3832	203 aa	8289	8900	0.010	0.001	0.003	0.008	0.003	0.008	0.008	0.022	0.000	0.005	0.067
SMa1770	RelE	57 aa	1E+06	1E+06	0.003	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.040	0.017	0.060
SMB21336	Xre	314 aa	1E+06	1E+06	0.008	0.004	0.003	0.002	0.003	0.002	0.005	0.017	0.007	0.008	0.060
SMB20859	Xre	316 aa	1E+06	1E+06	0.009	0.006	0.004	0.003	0.004	0.003	0.011	0.008	0.007	0.004	0.057
SMa0319	Xre	333 aa	177973	178974	0.020	0.011	0.002	0.002	0.002	0.002	0.000	0.008	0.005	0.002	0.054
SMc01210	HEPN	57 aa	2E+06	2E+06	0.000	0.000	0.002	0.001	0.002	0.001	0.000	0.021	0.005	0.009	0.039
SMa2281	COG5642	110 aa	1E+06	1E+06	0.009	0.002	0.004	0.003	0.004	0.003	0.000	0.000	0.010	0.002	0.038

SMb21670	COG3832	128 aa	1E+06	1E+06	0.000	0.008	0.001	0.001	0.001	0.001	0.006	0.012	0.000	0.006	0.037
SMb20222	Xre	140 aa	229750	230172	0.012	0.002	0.001	0.004	0.001	0.004	0.000	0.005	0.000	0.005	0.036
SMa0917	MazFn	108 aa	509885	510211	0.006	0.002	0.001	0.000	0.001	0.000	0.000	0.004	0.002	0.007	0.024