

Suppl. Table 8. *Haloferax volcanii* pHv4 base substitution and inserion-deletion (indel) summary statistics

MA Line	Substitutions											Indels				Total sites	Gen.	Sites× Gen	Base- sub Rate	Indel Rate	
	Transitions			Transversions					Ins.	Del.											
	GC>AT	AT>GC	AT>TA	GC>TA	AT>CG	GC>CG															
Hv1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3384	1E+09	0	0
Hv2	1	1E-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3456	1E+09	8E-10	0
Hv4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3456	1E+09	0	0
Hv5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3456	1E+09	0	0
Hv7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3072	1E+09	0	0
Hv8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3384	1E+09	0	0
Hv16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3504	1E+09	0	0
Hv17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	8E-10	4E+05	3528	1E+09	0	8E-10
Hv18	1	1E-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3312	1E+09	9E-10	0
Hv19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9E-10	3E+05	3288	1E+09	0	9E-10
Hv20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9E-10	3E+05	3168	1E+09	0	9E-10
Hv21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3096	1E+09	0	0
Hv22	0	0	0	0	1	3E-09	0	0	0	0	0	0	0	0	0	0	4E+05	2832	1E+09	1E-09	0
Hv23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3240	1E+09	0	0
Hv25	0	0	0	0	0	0	1	8E-10	0	0	0	0	0	0	0	0	5E+05	3360	2E+09	6E-10	0
Hv26	0	0	0	0	0	0	0	0	0	0	1	1E-09	0	0	0	0	3E+05	3360	1E+09	9E-10	0
Hv29	2	3E-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3168	1E+09	2E-09	0
Hv30	0	0	0	0	0	0	1	1E-09	0	0	0	0	0	0	0	0	4E+05	3360	1E+09	8E-10	0
Hv32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3312	1E+09	0	0
Hv33	1	1E-09	1	2E-09	0	0	1	1E-09	0	0	0	0	0	0	1	9E-10	4E+05	3240	1E+09	3E-09	9E-10
Hv34	1	1E-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3336	1E+09	9E-10	0
Hv35	0	0	0	0	0	0	1	1E-09	0	0	0	0	0	0	0	0	4E+05	3288	1E+09	9E-10	0
Hv41	0	0	0	0	0	0	0	0	0	0	1	1E-09	0	0	0	0	4E+05	3216	1E+09	9E-10	0
Hv42	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3192	1E+09	0	0
Hv43	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3360	1E+09	0	0
Hv44	0	0	1	3E-09	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	2904	1E+09	1E-09	0
Hv45	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3120	1E+09	0	0
Hv46	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3288	1E+09	0	0
Hv47	0	0	1	2E-09	1	2E-09	0	0	0	0	0	0	0	0	0	0	4E+05	3408	1E+09	2E-09	0
Hv48	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	9E-10	3E+05	3312	1E+09	0	9E-10
Hv49	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3336	1E+09	0	0
Hv50	0	0	0	0	0	0	1	1E-09	0	0	0	0	0	0	0	0	4E+05	3408	1E+09	8E-10	0
Hv51	1	2E-09	0	0	0	0	1	2E-09	0	0	0	0	0	0	0	0	3E+05	3288	9E+08	2E-09	0
Hv52	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6E+05	3600	2E+09	0	0
Hv53	0	0	1	2E-09	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3456	1E+09	8E-10	0
Hv54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3528	1E+09	0	0
Hv65	2	3E-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3384	1E+09	2E-09	0
Hv66	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3336	1E+09	0	0
Hv67	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3168	1E+09	0	0
Hv68	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3216	1E+09	0	0

Hv69	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3336	1E+09	0	0
Hv73	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3096	1E+09	0	0
Hv74	0	0	1	2E-09	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3192	1E+09	9E-10	0
Hv75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3192	1E+09	0	0
Hv76	1	1E-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3168	1E+09	9E-10	0
Hv77	1	1E-09	0	0	1	2E-09	0	0	0	0	0	0	0	0	0	0	4E+05	3144	1E+09	2E-09	0
Hv79	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3168	1E+09	0	0
Hv80	0	0	0	0	0	0	0	0	2	5E-09	0	0	0	0	0	0	4E+05	3000	1E+09	2E-09	0
Hv85	1	1E-09	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5E+05	3096	1E+09	7E-10	0
Hv86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3096	9E+08	0	0
Hv87	0	0	0	0	0	0	0	0	1	3E-09	0	0	0	0	0	0	3E+05	3312	1E+09	9E-10	0
Hv88	1	1E-09	1	2E-09	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3432	1E+09	2E-09	0
Hv90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4E+05	3144	1E+09	0	0
Hv98	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3E+05	3312	1E+09	0	0
	13		6		3		6		3		2		0		5						
Overall mut rate	3E-10		3E-10		1E-10		2E-10		1E-10		5E-11		0		8E-11				5E-10	8E-11	
lower limit	2E-10		1E-10		3E-11		6E-11		3E-11		6E-12		0		3E-11				4E-10	3E-11	
upper limit	6E-10		6E-10		4E-10		3E-10		4E-10		2E-10		6E-11		2E-10				7E-10	2E-10	
SEM*	1E-10		1E-10		8E-11		6E-11		1E-10		4E-11		0		4E-11				1E-10	4E-11	

* SEM is the standart error.