

Supplemental Table 3. Flagellar and chemotaxis genes in the *H. neptunium* genome

locus	5'-end	3'-end	gene name	gene symbol	proposed role	closest BLAST match
HNE_0241	231999	231484	flagellar basal body-associated protein FliL	<i>fliL</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0242	232128	233714	flagellar M-ring protein FliF	<i>fliF</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0244	234339	234638	putative motor switch protein FliN		motor	<i>Geobacillus kaustophilus</i> HT
HNE_0245	234635	235393	flagellar biosynthetic protein FliP	<i>fliP</i>	export apparatus	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0246	235390	236484	motor switch protein FliG	<i>fliG</i>	motor	<i>Magnetococcus</i> sp. MC-1
HNE_0247	237665	236556	flagellar P-ring protein FlgI	<i>flgI</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0248	238647	237670	flagellar hook-associated protein FlgL	<i>flgL</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0249	240104	238653	flagellar hook-associated protein FlgK	<i>flgK</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0250	241435	240131	flagellar hook protein FlgE	<i>flgE</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0251	242417	241554	motility enabling protein MotB	<i>motB</i>	motor	<i>Caulobacter crescentus</i> CB15
HNE_0252	242730	243470	putative motor switch protein FliM		motor	<i>Mesorhizobium loti</i> MAFF 303099
HNE_0253	243541	244407	motility enabling protein MotA	<i>motA</i>	motor	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0255	246167	246883	flagellar basal-body rod protein FlgF	<i>flgF</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3

HNE_0256	246912	247697	flagellar basal-body rod protein FlgG	<i>flgG</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0257	247702	248109	P-ring formation protein FlgA	<i>flgA</i>	flagellar assembly	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0258	248091	248810	flagellar L-ring protein FlgH	<i>flgH</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0260	250075	249425	flagellar hook cap protein FlgD	<i>flgD</i>	flagellar assembly	<i>Gluconobacter oxydans</i> 621H
HNE_0261	251419	250085	flagellar hook length control protein FliK	<i>fliK</i>	flagellar assembly	<i>Caulobacter vibrioides</i>
HNE_0262	251534	251860	putative rod cap protein FlgJ	<i>flgJ</i>	flagellar assembly	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0264	252387	253634	flagellar filament protein, flagellin LafI		flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0265	253746	254132	flagellar regulatory protein FlaF	<i>flaF</i>	regulatory	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0266	254132	254557	putative flagellar repressor protein FlbT		regulatory	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0267	254559	255407	flagellar basal-body rod protein FlgF	<i>flgF</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0268	256802	255414	flagellar protein export ATPase FliI	<i>fliI</i>	export apparatus	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0269	256887	257258	flagellar basal-body rod protein FlgB	<i>flgB</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0270	257273	257659	flagellar basal-body rod protein FlgC	<i>flgC</i>	flagellar structure	<i>Agrobacterium tumefaciens</i>
HNE_0271	257672	257971	flagellar basal body rod adaptor protein FliE	<i>fliE</i>	flagellar structure	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0272	257990	258253	flagellar biosynthetic protein FliQ	<i>fliQ</i>	export apparatus	<i>Silicibacter pomeroyi</i> DSS-3

HNE_0273	258263	260341	flagellar biosynthetic protein FlhA	<i>flhA</i>	export apparatus	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0274	260383	261096	flagellar biosynthetic protein FliR	<i>fliR</i>	export apparatus	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0275	261106	262179	flagellar biosynthetic protein FlhB	<i>flhB</i>	export apparatus	<i>Silicibacter pomeroyi</i> DSS-3
HNE_0499	491437	491817	flagellar repressor protein FlbT	<i>flbT</i>	regulatory	<i>Caulobacter vibrioides</i>
HNE_0639	642444	642809	chemotaxis protein CheY	<i>cheY</i>	unknown	<i>Caulobacter crescentus</i> CB15
HNE_0640	642879	643715	methyltransferase CheR	<i>cheR</i>	unknown	<i>Bradyrhizobium japonicum</i> USDA 110
HNE_0894	913827	913147	putative motility enabling protein MotB		motor	<i>Caulobacter crescentus</i> CB15
HNE_0942	957380	958327	flagellar regulatory protein FlhF	<i>flhF</i>	regulatory	<i>Xanthomonas axonopodis</i> pv. <i>citri</i> strain 306
HNE_0943	958332	959168	flagellar regulatory protein MotR	<i>motR</i>	regulatory	<i>Desulfovibrio vulgaris</i> subsp. <i>vulgaris</i> strain Hildenborough
HNE_0944	959302	960015	global response regulator CtrA	<i>ctrA</i>	regulatory	<i>Mesorhizobium loti</i> MAFF 303099
HNE_1392	1420274	1421230	putative flagellar motor switch protein FliG		motor	<i>Rhodospirillum centenum</i>
HNE_1394	1421640	1421909	Flagellar motor switch protein FliN	<i>fliN</i>	motor	<i>Rhodopseudomonas palustris</i> CGA009
HNE_3347	3497373	3496498	putative motility enabling protein MotA		motor	<i>Caulobacter crescentus</i> CB15