

190750898 Schizosaccharomyces pombe
118352502 Tetrahymena thermophila
66824061 Dictyostelium discoideum AX4
198424749 Ciona intestinalis
24648960 Drosophila melanogaster
221105315 Hydra magnipapillata
196007462 Trichoplax adhaerens
33598952 Homo sapiens
PSIPred 33598952:
2DK5 Human
15237811 Arabidopsis thaliana
226494183 Zea mays

167044323 marine crenarchaeote HF4000 APKG6B14
118575757 Cenarchaeum symbiosum A
161528904 Nitrosopumilus maritimus SCM1
PSIPred 161528904:

21898353 *Desulfatococcus kamchatkensis* DSM 12319
7605701 *Desulfatococcus* sp. DSM 6339
15921354 *Sulfolobus tokodaii* str. 7
15897825 *Sulfolobus solfataricus* P2
146304490 *Thermoplasma* sedula DSM 5348
191974827 *Thermophilum pendens* Hrk 5
159040723 *Dactylothermus maquilingensis* IC-167
119874030 *Pyrobaculum* sp. DSM 4186
126460340 *Pyrobaculum caldifontis* JCM 11548
145591943 *Pyrobaculum arsenaticum* DSM 13514
118431914 *Aeropyrum pernix* K1
126466142 *Staphylothermus marinus* F
156937048 *Thermoplasma* sp. KIM-4
140273750 *Hyperthermus butylicus* DSM 5456
114797795 *Archaeoglobus fulgidus* DSM 4304

76802023 *Natronomonas pharaonis* DSM 2180
 15790102 *Halobacterium salinarum* DSM 29840
 15790102 *Halobacterium* sp. NRC-1
 55377680 *Halococcus marismortui* ATCC 43049
 227390426 *Halomicrobium mukohataei* DSM 12286
 15790102 *Halobacterium* sp. NRC-1
 224792927 *Halorubrum lacusprofundi* ATCC 49239
 110667748 *Halobacterium salinarum* DSM 16790
 227879940 *Halomicrobium borinquense* DSM 11551
 147919072 *Uncultured methanogenic archaeon* RC-1
 917726243 *Methanococcoides burtonii* DSM 6242
 917726103 *Methanococcus barkeri* str. Fusaro
 20090274 *Methanosarcina acetivorans* C2A
 116753459 *Methanosaeta thermophila* PT
 124410141 *Methanococcus pusillus* DSM 12286
 162179513 *Methanococcus thermophilus* JRL1
 88602492 *Methanospirillum hungatei* JF-1
 154151156 *Candidatus Methanoregula boonei* GAB
 219952144 *Methanophaea palustris* RI-9c

consensus/80%
3BPX
188595948 *Methanothermobacter thermautotrophicus*
15672724 *Lactococcus lactis* subsp. *lactis* IL14
28373542 *Enterococcus faecalis*
15896901 *Clostridium acetobutylicum* ATCC 824
16081123 *Bacillus subtilis* spores 168
23098701 *Oceanobacillus ihenyensis* HTE831
20089988 *Methanosarcina acetivorans* C2A
219852062 *Methanospaerula palustris* E1-9c
160901504 *Petrotooccus mobilis* SJ95

[illegible]

296 MCRNVCEIITAGYEN-EGTLQSELWKLLKLSRDGSRRLALKLERMGMITREKILEKQ-RWTY
247 LTNKVCEMLAAYES-AGAVQNLVWKRLKLSNRNGARLALKLERTGYITREKILEKG-RWTY
176 LTNKVCOILAERES-EDMFCSELWKLLKLSRDGSRRLSLKLRIGPITREKMLEKN-RWTY
-----HHHHHHHHHH-----HHHHHHHH-----HHHHHHHHHHHHHH-----EEEEEE-----EEEE

[illegible][illegible][illegible][illegible][illegible]

1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

	L
	T
	T7
	T7
	T7
	T7
	T
	E
	I
	J
	E
	T
	T
	K
	X
	K
	R
	T
	A
	H
	I
	R
	Z

[illegible][illegible]

	$\frac{1}{2}(\mathcal{K} - \mathcal{K}')$
	$\frac{1}{2}(\mathcal{K} - \mathcal{K}')$
	$\frac{1}{2}(\mathcal{K} - \mathcal{K}')$
	$\frac{1}{2}(\mathcal{K} - \mathcal{K}')$

[illegible][illegible][illegible][illegible]

IST-----KSIEGACFLTGPVQSKSISDGEISPKTKWIEDW 399
 IST-----ASIENSCLIGPVEQGSADGEINPRCKWILLDW 350
 IST-----QS IENSCLVGPVEQKSLGEISPRNCKIEDW 279
 -8-----HHHHH-----EE-HHHHHHHHH

[illegible]

1.126	AGMLSPFVDEE	DPGDAFSQ	109
1.127	AGMLSPFVDEE	DAGDAFSQ	108
1.128	AGMLSPFVGEVE	DPGDAFSQ	109
1.129	AGQLSPFVIGEEV	DPDIDTFSQ	108
1.130	AGQLSPFVIGEEV	DARDFTSQ	108
1.131	AGMLSPFVIGEEV	DARDFTSQ	108
1.132	AGMLSPFVIGEEV	DAGDAFSQ	108
1.133	AGMLSPFVIGEEV	DARDFTSQ	108
1.134	AGMLSPFVIGEEV	DARDFTSQ	108
1.135	AGMLSPFVIGEEV	HANSDAFSQ	108
1.136	AGMLSPFVIGEEV	HANSDAFSQ	108
1.137	AGMLSPFVIGEEV	HANSDAFSQ	108
1.138	AEDEVAFVDEE	PDYDGLNN	111
1.139	AEDEVAFVDEE	PDYDGLNN	111
1.140	AEDEVAFVDEE	PDYDGLNN	111
1.141	AEDEVAFVDEE	PDYDGLNN	111
1.142	AEDEVAFVDEE	PDYDGLNN	111
1.143	AEDEVAFVDEE	PDYDGLNN	111
1.144	AEDEVAFVDEE	PDYDGLNN	111
1.145	AEDEVAFVDEE	PDYDGLNN	111
1.146	AEDEVAFVDEE	PDYDGLNN	111
1.147	AEDEVAFVDEE	PDYDGLNN	111
1.148	AEDEVAFVDEE	PDYDGLNN	111
1.149	AEDEVAFVDEE	PDYDGLNN	111
1.150	AEDEVAFVDEE	PDYDGLNN	111
1.151	AEDEVAFVDEE	PDYDGLNN	111
1.152	AEDEVAFVDEE	PDYDGLNN	111
1.153	AEDEVAFVDEE	PDYDGLNN	111
1.154	AEDEVAFVDEE	PDYDGLNN	111
1.155	AEDEVAFVDEE	PDYDGLNN	111
1.156	AEDEVAFVDEE	PDYDGLNN	111
1.157	AEDEVAFVDEE	PDYDGLNN	111
1.158	AEDEVAFVDEE	PDYDGLNN	111
1.159	AEDEVAFVDEE	PDYDGLNN	111
1.160	AEDEVAFVDEE	PDYDGLNN	111
1.161	AEDEVAFVDEE	PDYDGLNN	111
1.162	AEDEVAFVDEE	PDYDGLNN	111
1.163	AEDEVAFVDEE	PDYDGLNN	111
1.164	AEDEVAFVDEE	PDYDGLNN	111
1.165	AEDEVAFVDEE	PDYDGLNN	111
1.166	AEDEVAFVDEE	PDYDGLNN	111
1.167	AEDEVAFVDEE	PDYDGLNN	111
1.168	AEDEVAFVDEE	PDYDGLNN	111
1.169	AEDEVAFVDEE	PDYDGLNN	111
1.170	AEDEVAFVDEE	PDYDGLNN	111
1.171	AEDEVAFVDEE	PDYDGLNN	111
1.172	AEDEVAFVDEE	PDYDGLNN	111
1.173	AEDEVAFVDEE	PDYDGLNN	111
1.174	AEDEVAFVDEE	PDYDGLNN	111
1.175	AEDEVAFVDEE	PDYDGLNN	111
1.176	AEDEVAFVDEE	PDYDGLNN	111
1.177	AEDEVAFVDEE	PDYDGLNN	111
1.178	AEDEVAFVDEE	PDYDGLNN	111
1.179	AEDEVAFVDEE	PDYDGLNN	111
1.180	AEDEVAFVDEE	PDYDGLNN	111
1.181	AEDEVAFVDEE	PDYDGLNN	111
1.182	AEDEVAFVDEE	PDYDGLNN	111
1.183	AEDEVAFVDEE	PDYDGLNN	111
1.184	AEDEVAFVDEE	PDYDGLNN	111
1.185	AEDEVAFVDEE	PDYDGLNN	111
1.186	AEDEVAFVDEE	PDYDGLNN	111
1.187	AEDEVAFVDEE	PDYDGLNN	111
1.188	AEDEVAFVDEE	PDYDGLNN	111
1.189	AEDEVAFVDEE	PDYDGLNN	111
1.190	AEDEVAFVDEE	PDYDGLNN	111
1.191	AEDEVAFVDEE	PDYDGLNN	111
1.192	AEDEVAFVDEE	PDYDGLNN	111
1.193	AEDEVAFVDEE	PDYDGLNN	111
1.194	AEDEVAFVDEE	PDYDGLNN	111
1.195	AEDEVAFVDEE	PDYDGLNN	111
1.196	AEDEVAFVDEE	PDYDGLNN	111
1.197	AEDEVAFVDEE	PDYDGLNN	111
1.198	AEDEVAFVDEE	PDYDGLNN	111
1.199	AEDEVAFVDEE	PDYDGLNN	111
1.200	AEDEVAFVDEE	PDYDGLNN	111
1.201	AEDEVAFVDEE	PDYDGLNN	111
1.202	AEDEVAFVDEE	PDYDGLNN	111
1.203	AEDEVAFVDEE	PDYDGLNN	111
1.204	AEDEVAFVDEE	PDYDGLNN	111
1.205	AEDEVAFVDEE	PDYDGLNN	111
1.206	AEDEVAFVDEE	PDYDGLNN	111
1.207	AEDEVAFVDEE	PDYDGLNN	111
1.208	AEDEVAFVDEE	PDYDGLNN	111
1.209	AEDEVAFVDEE	PDYDGLNN	111
1.210	AEDEVAFVDEE	PDYDGLNN	111
1.211	AEDEVAFVDEE	PDYDGLNN	111
1.212	AEDEVAFVDEE	PDYDGLNN	111
1.213	AEDEVAFVDEE	PDYDGLNN	111
1.214	AEDEVAFVDEE	PDYDGLNN	111
1.215	AEDEVAFVDEE	PDYDGLNN	111
1.216	AEDEVAFVDEE	PDYDGLNN	

[illegible]

MarR family