

Table 1: Proteins that are specific for all Archaea
Gao, B. and Gupta, R.S. BMC Genomics (2007) 8, 86.

Proteins specific to all Archaea							
PAB0063	[NP_125796]	Cca	COG1746	PAB0247	[NP_126062]	DNA binding	COG1571
PAB0252	[NP_126069]	RNA-binding	CDD16214	PAB0439	[NP_126328]		COG1308
PAB0316	[NP_126166]	DNA primase	COG0358	PAB0475	[NP_126376]	regulator	COG1709
PAB1633	[NP_126790]	PilT ATPase	COG1855	PAB1040	[NP_127251]	SpoU	CDD6631
PAB1716	[NP_126666]	NMD3	CDD16276	PAB1106	[NP_127361]		CDD9578
PAB2291	[NP_125771]		CDD6629	PAB1706	[NP_126677]		COG1634
PAB0018a	[NP_125721]	RNA binding	COG2888	PAB2062	[NP_126118]		CDD16190
PAB0075 ¹	[NP_125817]	dehydratase	CDD23288	PAB2104	[NP_126058]	HTH	COG1395
Archaea-specific proteins with gene loss in few species							
PAB0301	[NP_126142]	SK	COG1685	PAB7388	[NP_127197]	Ribosomal_LX	CDD2437
PAB0654	[NP_126650]		CDD8168	PAB0469.1n	[NP_877631]		CDD8674
PAB0950	[NP_127106]	TFIIE	CDD480	PAB0547	[NP_126484]		COG1759
PAB1112	[NP_127373]		CDD5727	PAB0552	[NP_126501]	Hjr	CDD29957
PAB1135	[NP_127406]		CDD8168	PAB0623	[NP_126611]		CDD9586
PAB1241	[NP_127355]		CDD9682	PAB1272	[NP_127310]		COG1759
PAB1387	[NP_127161]	flaJ	COG1955	PAB1429	[NP_127105]		COG2433
PAB1715	[NP_126667]		CDD9801	PAB1721	[NP_126657]		COG2248
PAB1906	[NP_126377]		CDD2531	PAB2342 ²	[NP_125707]		CDD15774
PAB7094	[NP_126085]	Alba	CDD25844	PAB7309	[NP_126897]		CDD2523

These proteins were identified by BLASTP searches and their specificity is further confirmed by PSI-BLAST searches. For details, see method section. The protein ID number starting with PAB represents query protein from the genome of *P. abyssi* GE5, which was used as probe to perform the blast search. Accession numbers for these proteins are shown in square brackets. The possible cellular functions and COG or CDD number of some proteins are noted. For other proteins, the cellular functions are not known.

Note¹. Two low-scoring homologs to PAB0075 were also found in *Dehalococcoides ethenogenes* 195 (*Chloroflexi*) and *Dehalococcoides* sp. CBDB1.

Note². A homolog to PAB2342 is also found in *Oenococcus oeni* PSU-1, *Leuconostoc mesenteroides* subsp. *mesenteroides* ATCC 8293 and *Clostridium perfringens* str. 13.