

Table S1. Chi-square tests for distributions of gene classes in Thaumarchaeota as compared to GII/III-Euryarchaeota. HT-genes, horizontally transferred genes. *, only case for which the two distribution patterns were not significantly similar.

	COG	KEGG
Thaumarchaeota vs. GII/III Euryarchaeota archaeal core	0.301596376	0.123338621
Thaumarchaeota vs. GII/III Euryarchaeota-specific core non HT-genes	0.097462121	0.196948972
Thaumarchaeota vs. GII/III Euryarchaeota-specific HT-genes (early transfers)	0.544409189	0.050684926
Thaumarchaeota vs. GII/III Euryarchaeota shell HT-genes (late transfers)	0.324156576	4.03236E-07*