

Table S2.

Characteristic	<i>Defluviitoga</i>	<i>Fervidobacterium</i>	<i>Kosmotoga</i>	<i>Marinitoga</i>	<i>Mesotoga</i>	<i>Petrotoga</i>	<i>Thermosipho</i>	<i>Thermotoga</i>
Isolation source (s)	Sludge reactor	Terrestrial hot springs	Hydrothermal fields and oil reservoirs	Hydrothermal vents and thermal springs	Deep aquifers and harbour sediments	Oil reservoirs	Hydrothermal vents and oil reservoirs	Hydrothermal vents, oil reservoirs and bioreactors
Temperature Optimum (°C)	55	65-80	60-70	55-65	37-45	55-60	65-75	60-80
Growth at low temperatures	No growth below 37 °C	No growth below 40-45°C	No growth below 20°C	No growth below 25°C	No growth below 20°C	No growth below 30°C	No growth below 35°C	No growth below 45°C
pH (Optimum)	6.9	6.5-7.8	6.8-7.1	5.5-7.0	7.3-7.5	6.5-8.0	6.0-7.5	6.5-7.5
NaCl (%) (Optimum)	0.5	0-0.4	1.5-3.0	2.0-4.0	0.2-4.0	0.5-6.0	2.0-3.0	0-2.7
Oxygen tolerance	<0.5% O ₂	Strict anaerobes	Strict anaerobes (only one species growing at 15% O ₂)	< 4% O ₂	< 0.5 % O ₂	< 0.2-1% O ₂	< 0.2-8% O ₂	Strict anaerobes
Electron acceptors								
Elemental sulfur	+	+	±	+	+	+	±	±
Thiosulfate	+	±	±	±	±	±	±	+
Cystine	ND	ND	±	±	-	-	±	±
Sulfite	-	-	-	-	±	±	-	-
Sulfate	-	-	±	-	-	-	-	-
DNA G+C content (mol %)	33.6	31-41	40.8-43.7	26-29	45.3-47.5	32.4-36.1	27-33	38.7-51.3