Supplementary material

TABLE S1. Fluorescence signal strength at different formamide concentrations obtained in double hybridizations with oligonucleotide probes ELM1034 (specifically designed for strain Pei191^T; Cy3-labeled) and EUB338 (detecting most bacteria; fluorescein-labeled).[a]

Formamide	Strain Pei191^T		*Desulfurella acetivorans*	
(%)	ELM1034	EUB338	ELM1034	EUB338
0	+++	+	–	++
10	+++	+	–	++
20	+++	+	–	++
30 [b]	+++	+	–	++
40	++	W	–	++
50	–	–	–	++

[a] Symbols indicate fluorescence signal strength in decreasing order: +++, ++, +, w (weak), – (absent).

[b] Optimal formamide concentration used for purity control (see text).

TABLE S2. Whole-cell fatty acid composition of strain Pei191^{T}.

Fatty acid	Abundance (%)
C15:0 *iso*	25.3
C15:0 *anteiso*	16.3
C16:0 *iso*	12.1
C17:0 *iso*	8.0
C17:0 *anteiso*	7.3
C14:0 *iso*	6.1
C17:0 *iso* 3-OH	4.9
C16:0 *iso* 3-OH	3.3
C13:0 *iso*	2.9
C14:0 *iso* 3-OH	2.3
C16:0	2.1
C13:0 *anteiso*	1.7
C15:0 *iso* 3-OH	1.6
C17:0 2-OH	1.3

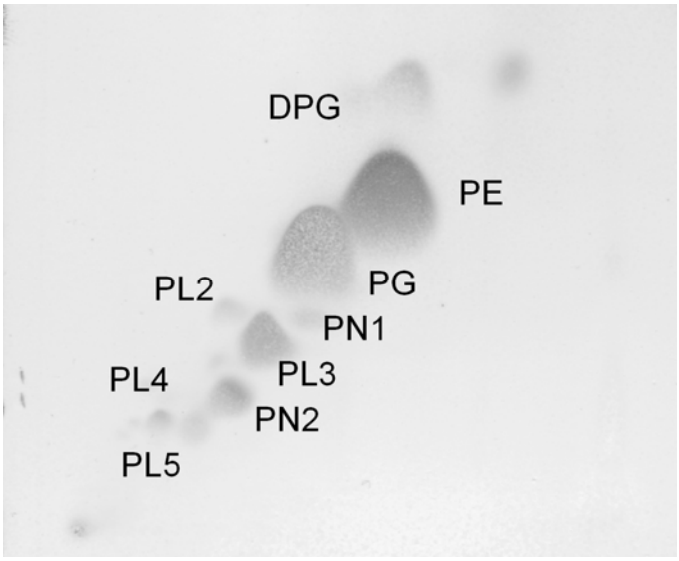

FIG. S1. Polar lipid analysis of strain Pei191^T by two-dimensional thin-layer chromatography. DPG, diphosphatidylglycerol; PG, phosphatidylglycerol; PE, phosphatidylethanolamine; PN1, PN2, unidentified amino-phospholipids; PL1, PL2, PL3, PL4, PL5, unidentified phospholipids. The first dimension was developed in chloroform/methanol/water (65:25:4, by vol.) and the second dimension in chloroform/methanol/acetic acid/water (80:12:15:4, by vol.).