

Supplementary Table 1. Summary of the best BLASTP hits of predicted proteins from single cell DEH-J10 to proteins in the NCBI-nr database using an e-value threshold of 10^{-5} .

Phylogenetic group	No. of hits	% of hits
<i>Dehalococcoides mccartyi</i>	214	13.7
<i>Dehalogenimonas lykanthroporepellens</i>	84	5.4
Other <i>Chloroflexi</i>	56	3.6
<i>Deltaproteobacteria</i> ^a	101	6.5
<i>Firmicutes</i> ^b	65	4.2
Methanogenic <i>Archaea</i>	65	4.2
Syntrophs ^c	24	1.5
No hits	449	28.8
Total queries	1557	100

^a Does not include hits to syntrophic *Deltaproteobacteria*

^b Does not include hits to syntrophic *Pelotomaculum* spp.

^c Syntrophs include: *Syntrophus aciditrophicus*, *Syntrophothermus lipocalidus*, *Syntrophobacter fumaroxidans*, *Pelotomaculum thermopropionicum*.