

Supplementary Figure S1. Secondary structure of the N-terminus of PilA proteins from Desulfuromonadales species and other bacteria that possess type IVa pilA genes. The location of alpha helices (represented by red H) and beta strands (represented by yellow E) was predicted with Jpred 4 (Drozdetskiy et al, 2015). Transmembrane helices (green background) were predicted with TmPred (Hofmann & Stoffel, 1993), TMHMM (Krogh et al, 2001), and HMMTOP (Tusnady & Simon, 2001).

[illegible]

[illegible]

Thauera humireducens (WP_048706629)

MKKIQKGFTLIELMIVVAIGILAAIAIPQFNEYRAKANDTTAIADVKNGITAVISSLR

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