

SOM Table 6. Proteins (gene names) used for phylogenetic analysis

Proteins	ORF Code
ribosomal protein L1 (rpl1)	kuste2954
ribosomal protein L2 (rpl2)	kuste2967
ribosomal protein L3 (rpl3)	kuste2964
ribosomal protein L4 (rpl4)	kuste2965
ribosomal protein L5 (rpl5)	kuste2976
ribosomal protein L6 (rpl6)	kuste2979
ribosomal protein L7/L12 (rpl7/12)	kuste2956
ribosomal protein L9 (rpl9)	kusta0031
ribosomal protein L10 (rpl10)	kuste2955
ribosomal protein L11 (rpl11)	kuste2953
ribosomal protein L13 (rpl13)	kusta0077
ribosomal protein L14 (rpl14)	kuste2974
ribosomal protein L15 (rpl15)	kuste2982
ribosomal protein L16 (rpl16)	kuste2971
ribosomal protein L17 (rpl17)	kuste2992
ribosomal protein L18 (rpl18)	kuste2980
ribosomal protein L19 (rpl19)	kuste3320
ribosomal protein L20 (rpl20)	kuste3972
ribosomal protein L21 (rpl21)	kustd2165
ribosomal protein L22 (rpl22)	kuste2969
ribosomal protein L23 (rpl23)	kuste2966
ribosomal protein L24 (rpl24)	kuste2975
ribosomal protein L27 (rpl27)	kustd2166
ribosomal protein L28 (rpl28)	kuste3127
ribosomal protein L29 (rpl29)	kuste2972
ribosomal protein L35 (rpl35)	kuste3971
ribosomal protein S2 (rps2)	kuste3466
ribosomal protein S3 (rps3)	kuste2970
ribosomal protein S4 (rps4)	kuste2990
ribosomal protein S5 (rps5)	kuste2981
ribosomal protein S6 (rps6)	kusta0028
ribosomal protein S7 (rps7)	kuste2960
ribosomal protein S8 (rps8)	kuste2978
ribosomal protein S9 (rps9)	kusta0076
ribosomal protein S10 (rps10)	kuste2963
ribosomal protein S11 (rps11)	kuste2989
ribosomal protein S12 (rps12)	kuste2959
ribosomal protein S13 (rps13)	kuste2987
ribosomal protein S15 (rps15)	kustc0534
ribosomal protein S16 (rps16)	kuste3318
ribosomal protein S17 (rps17)	kuste2973
ribosomal protein S18 (rps18)	kusta0030
ribosomal protein S19 (rps19)	kuste2968
ribosomal protein S20 (rps20)	kustd1559
RNA polymerase alpha subunit (rpoA)	kuste2991
RNA polymerase beta subunit (rpoB)	kuste2957
RNA polymerase beta' subunit (rpoC)	kuste2958

DNA gyrase subunit B (gyrB)	kustc0439
recombinase A (recA)	kustd1394
elongation factor Tu (EF-Tu)*	kuste2962

Genes

5S ribosomal RNA gene
16S ribosomal RNA gene
23S ribosomal RNA gene

* excluded from concatenated datasets because the *K. stuttgartiensis* EF-Tu clustered - independent of the treeing method applied - with *Chlorobium tepidum* suggesting that it was acquired by *K. stuttgartiensis* via lateral gene transfer. In addition, ribosomal proteins L31, L33, L36, and S14 were not included because they have been previously shown to be subject to lateral gene transfer events.