



Figure S2 – Mummer Plot:

Comparison of the *Db. autotrophicum* chromosome with the chromosomes of the closely related δ -proteobacteria *Dt. psychrophila*, *Dv. vulgaris*, *Dv. desulfuricans*, *G. sulfurreducens* and the sulfate reducing archeon *A. fulgidus*. Red dots indicate co-linear similarities, green dots indicate inverted similarities. The chromosome of *Db. autotrophicum* completely lacks synteny with the compared chromosomes. In contrast, a mummer plot of a comparison of *Dv. vulgaris* and *Dv. desulfuricans* has been added which shows genome synteny. All comparisons were performed with the programs from the MUMmersoftware package as described in the documentation for distant related sequences (<http://mummer.sourceforge.net/>).