

Primers and PCR conditions

16S rDNA universal γ -proteobacterial primers:

16Sup1 (5'-AGAGTTTGATCATGGCTCAGATTG-3') and

16Slo1 (5'-TACCTTGTTACGACTTCACCCCAG-3')

PCR conditions were 94°C for 2 min, followed by 30 cycles of 94°C for 15 s, 60°C for 30 s, and 72°C for 1 min. Mixtures of PCR consisted of 1.5 units of Taq DNA polymerase (Promega), 200 μ M deoxynucleotide triphosphate, 0.2 μ M primers, and 10 ng of DNA template in a final volume of 50 μ l.

atpD primers:

atpD_3F (5'- GGTAARGTNGGTCTDTTYGGYGGTGC-3') and

atpD_2R (5'- YTTCAGAYAAAYTCRTCCATACC-3').

PCR conditions were: 94°C for 2 min, followed by 30 cycles of 94°C for 15 s, 50°C for 30 s, and 72°C for 1 min. Mixtures of PCR consisted of 1.5 units of Taq DNA polymerase (Promega), 200 μ M deoxynucleotide triphosphate, 0.2 μ M primers, and 10 ng of DNA template in a final volume of 50 μ l.