***Supplementary Material***

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**A modified SDS-based DNA extraction method for high quality environmental DNA from seafloor environments**

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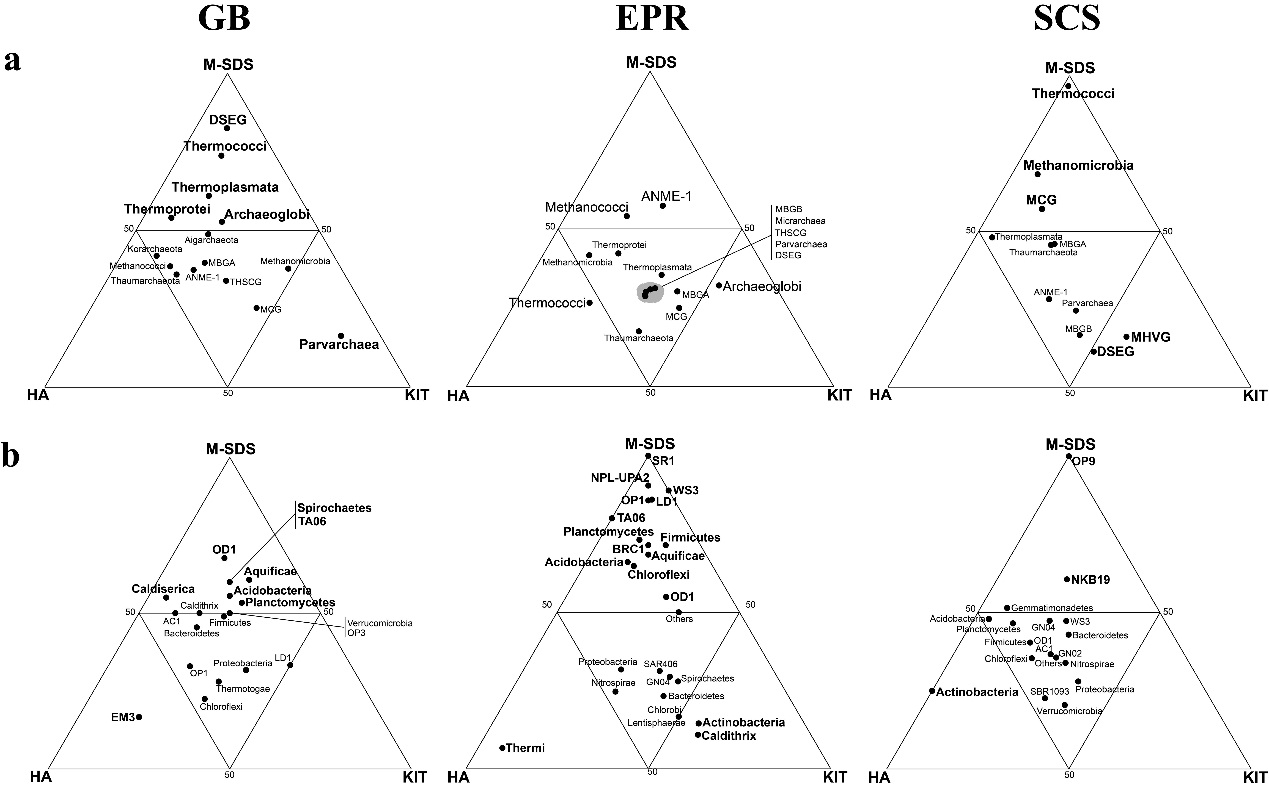
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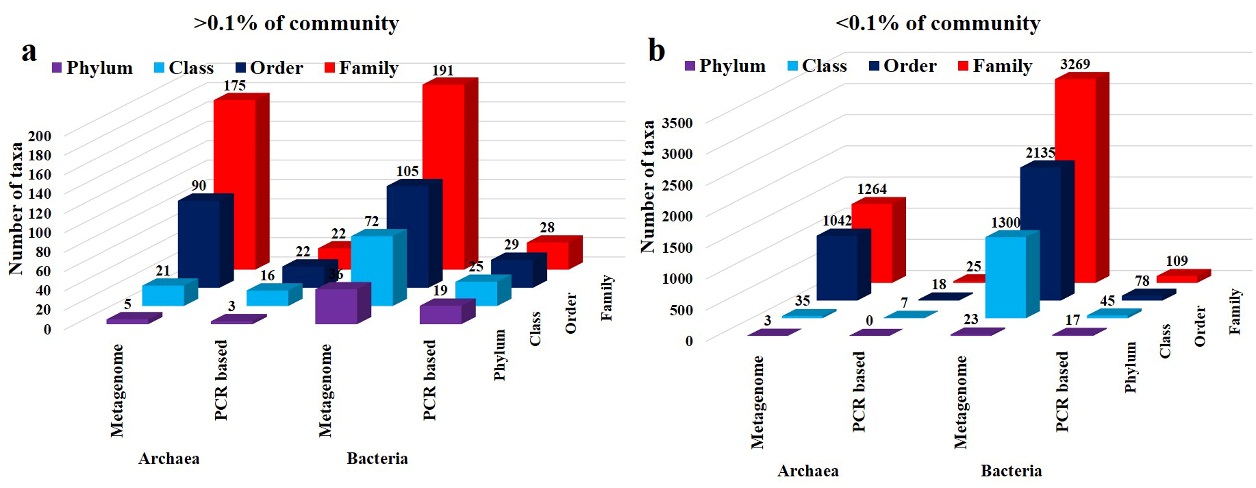
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**Figure S1. Ternary plots for (a) archaeal groups (class level) and (b) bacterial groups (phylum level) in three seafloor samples with respect to the DNA extraction methods.** Axes indicate the percentage of the designated groups detected by each method. The groups with more than 50% relative abundance among three methods are in bold font.



**Figure S2. Comparison of microbial groups from the metagenome data and the PCR-amplified data using the GB DNA sample extracted by the M-SDS method.** **(a)** Archaeal and bacterial taxonomic composition at different taxonomic level, when the designated group is >0.1%. **(b)** Archaeal and bacterial rare biosphere at different taxonomic level, when the designated group is <0.1%.