



Fig. 4. 16S rRNA gene sequences derived from marine sponges compared with those from marine bacterioplankton based on PCR amplification with universal bacterial primers (summarized from Hagstrom *et al.*, 2002; Hentschel *et al.*, 2002). Note that the abundances of phylotypes in gene libraries cannot be extrapolated to *in situ* abundances. Lineages such as the *Candidatus* phylum 'Poribacteria' and the *Archaea* are not represented because of mismatches in the primer regions.