

Free and bound bacterial lipids in sedimentary rocks

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Sedimentary bacterial lipids exist in free- and bound-forms. The bound-form lipids originate partly from biolipids (ester-, glycoside- and ether-lipids), and the rest (ester and thioether-lipids) was formed mostly during early diagenesis. The identification of the bound-forms is often conducted by selective bond-cleavages. We however should care that the effects of adsorption and/or entrapment of lipids on/into minerals possibly disturb the sequential chemical degradation of bound-lipids in sedimentary rocks. The degradation method is highly time-consuming, and therefore we need to develop a simpler and more sophisticated method for the routine analysis of bound lipids

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