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Overexpression and Purification of MarR
from *Methanocorpusculum labreanum*

Methanocorpusculum labreanum Z is a methanogenic microorganism indigenous to the Rancho La Brea Tar Pits in California. Little is known about the bioinorganic chemistry of this organism. From its genome sequence, proteins from *M. labreanum* that are likely to be involved in transition metal uptake have been identified. Genes for the putative regulatory protein MarR and a cobalt transport protein have been amplified from *M. labreanum* genomic DNA and cloned into *E. coli*. MarR has been overexpressed in *E. coli*, and appropriate purification protocols are now being developed. This fundamental work may permit the future application of this organism to problems such as methane production from tar sands or bioremediation.