Supporting Information

Insights into the methanogenic population and potential in subsurface marine sediments based on coenzyme F430 as a function-specific biomarker

MASANORI KANEKO*[1,2], YOSHINORI TAKANO[2], MASASHI KAMO[3], KAZUYA, MORIMOTO[1] TAKURO NUNOURA[4], NAOHIKO OHKOUCHI[2]

[1]Geological Survey of Japan, National Institute of Advanced Industrial Science and Technology (AIST), 1-1-1 Higashi, Tsukuba 305-8567, Japan
[2]Biogeochemistry Research Center, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), 2-15 Natsushima-cho, Yokosuka 237-0061 Japan
[3]Research Institute of Science for Safety and Sustainability, National Institute of Advanced Industrial Science and Technology (AIST), 16-1 Onogawa, Tsukuba 305-8569, Japan
[4]Research Center for Bioscience and Nanoscience, Japan Agency for Marine-Earth Science and Technology (JAMSTEC), 2-15 Natsushima-cho, Yokosuka 237-0061 Japan

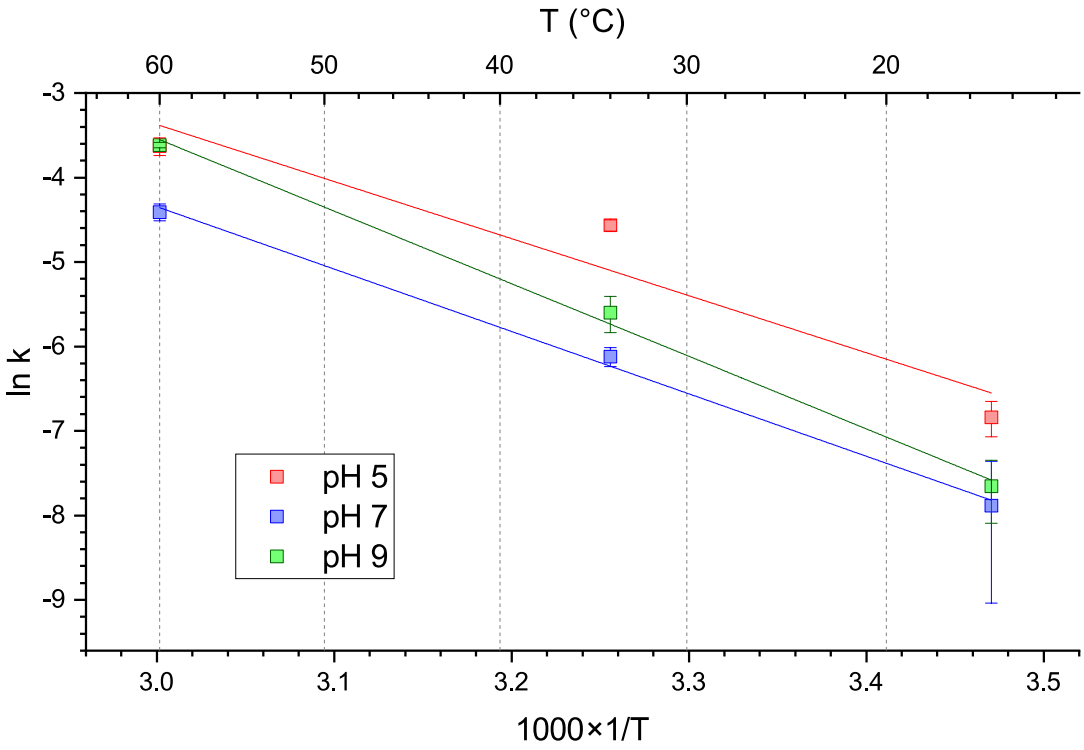

Figure S1. Arrhenius plot of growth of 12, 13-diepi-F430.

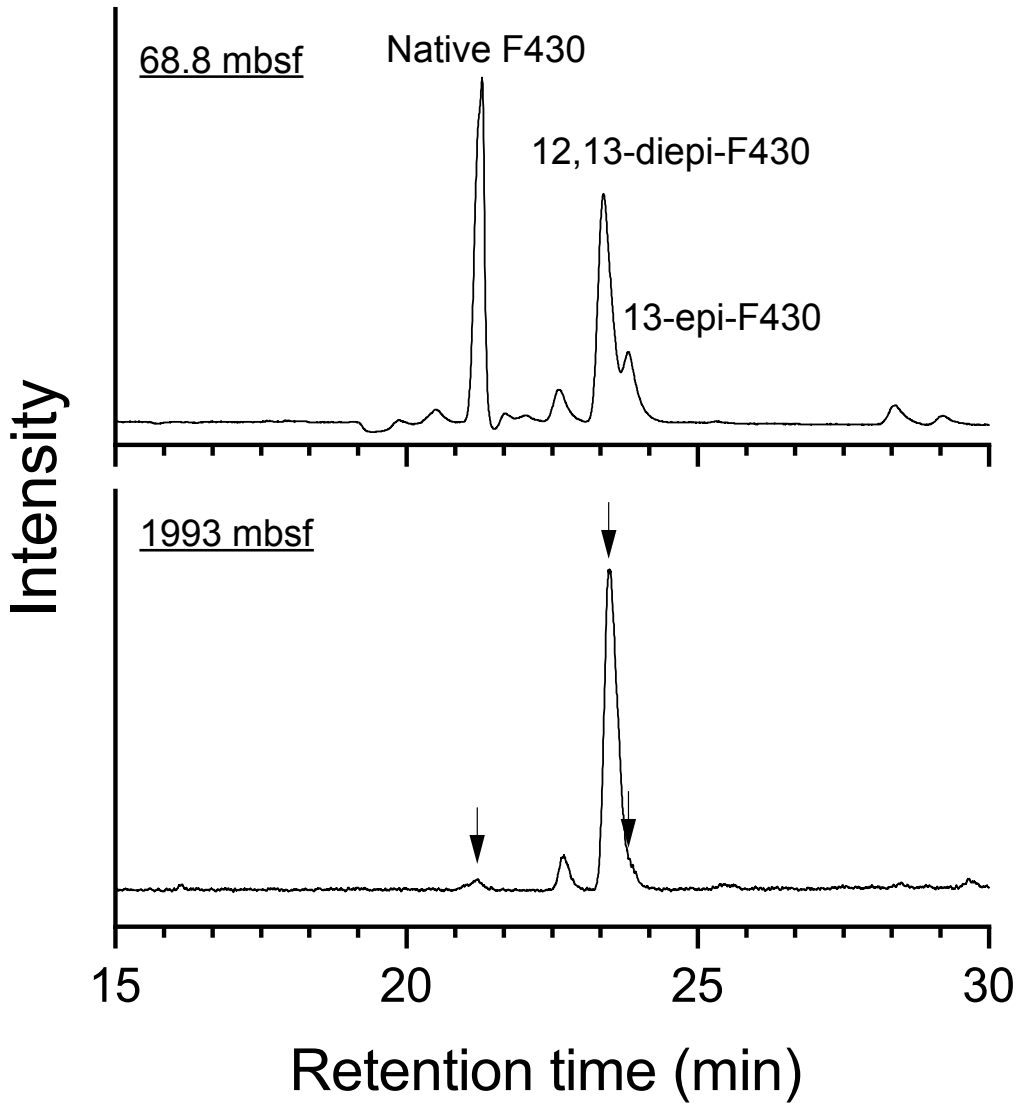

Figure S2. Representative MRM chromatograms of methyl esterified coenzyme F430 extracted from the marine sediments.

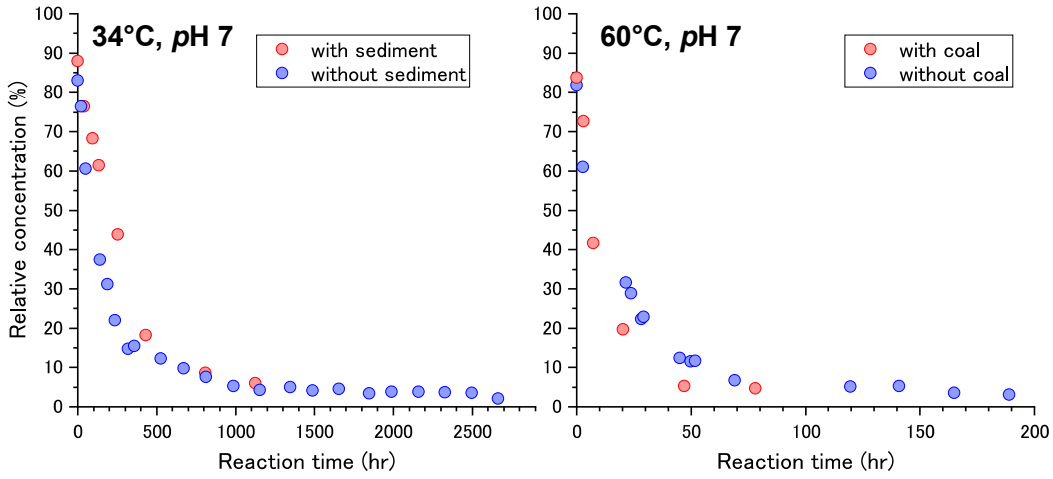

Figure S3. Degradation curves of native F430 with/without mineral matrices at the conditions of 34°C, *p*H7 and 60°C, *p*H7.

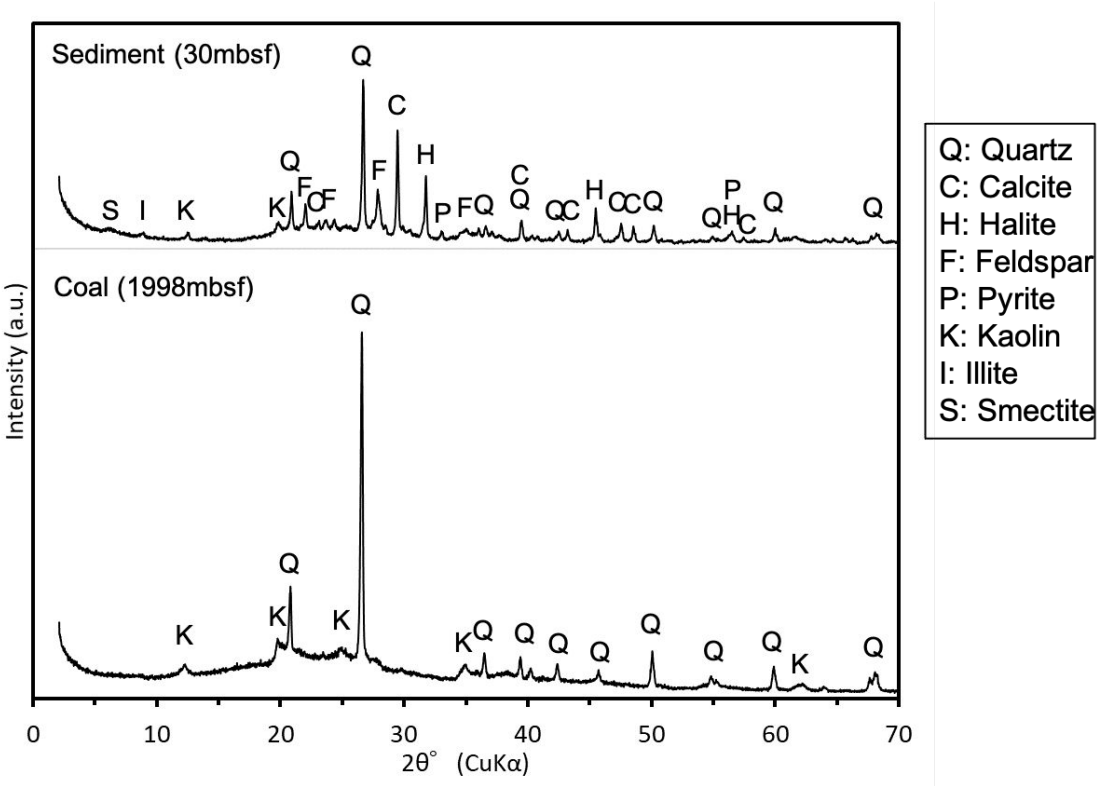

Figure S4. Powder XRD patterns of sediment and coal used in F430 degradation experiment.

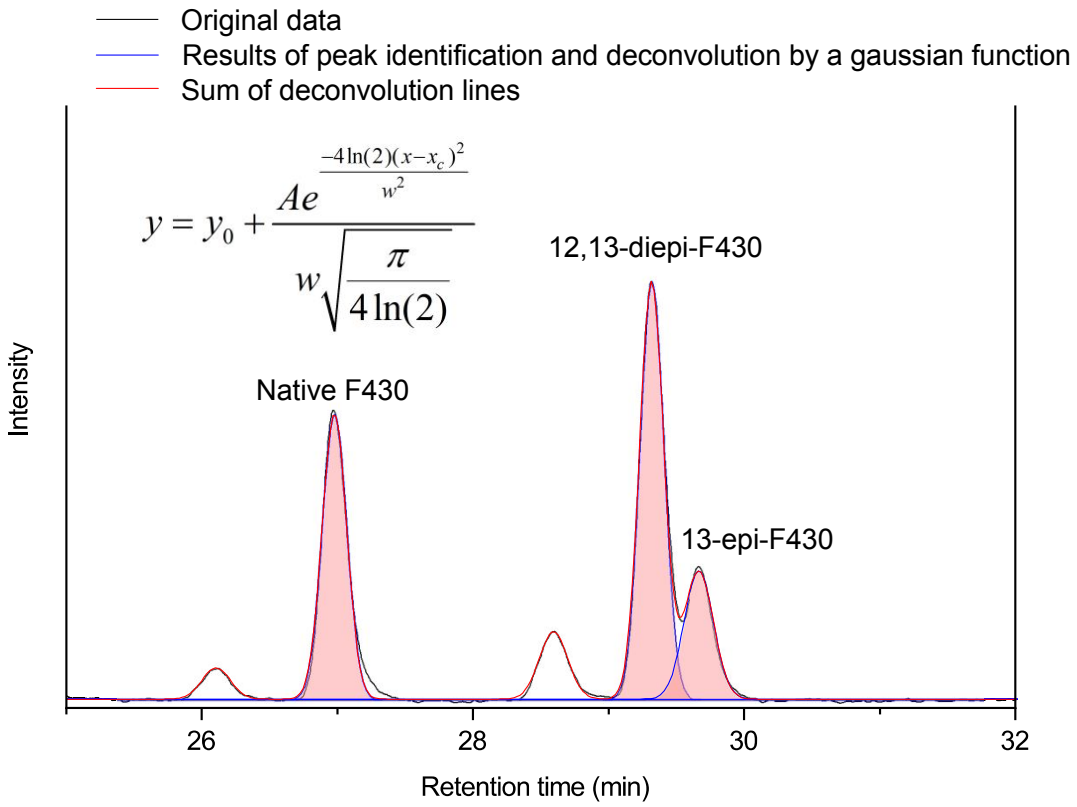

Figure S5. Peak deconvolution to quantify coenzyme F430 and its epimers.