

Analytical and Bioanalytical Chemistry

Electronic Supplementary Material

**Determination of heme in microorganisms using HPLC-MS/MS
and cobalt(III) protoporphyrin IX inhibition of heme acquisition
in *Escherichia coli***

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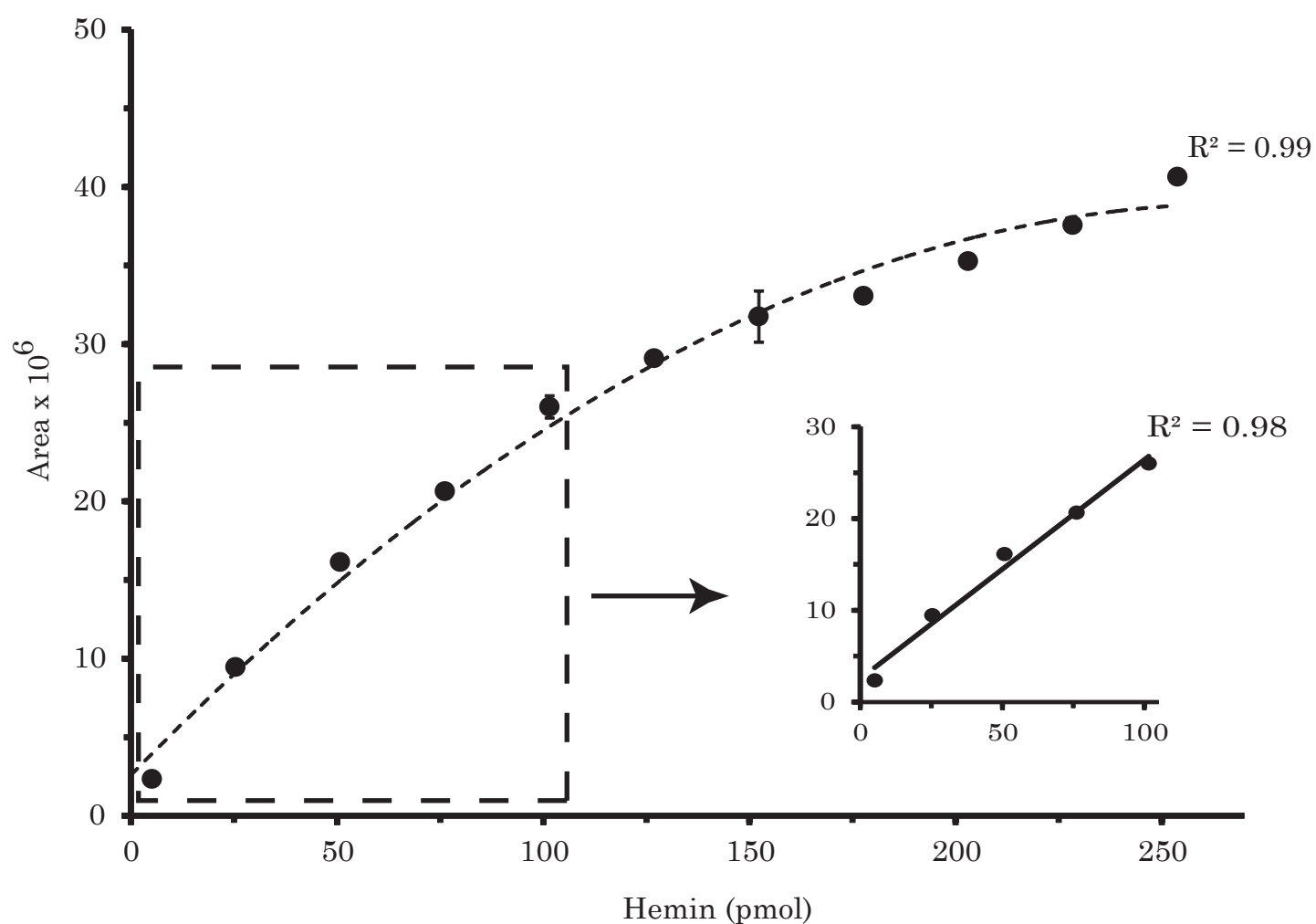


Fig. S1 Calibration curve for hemin at 11 different levels (5-250 pmol). The dashed regression line is a second degree polynomial fitted to all data points ($n=11$). Solid linear regression line is based on the five lowest levels, 5-100 pmol. Each data point is an average of triplicate injections except point 5 and 7 were $n=2$

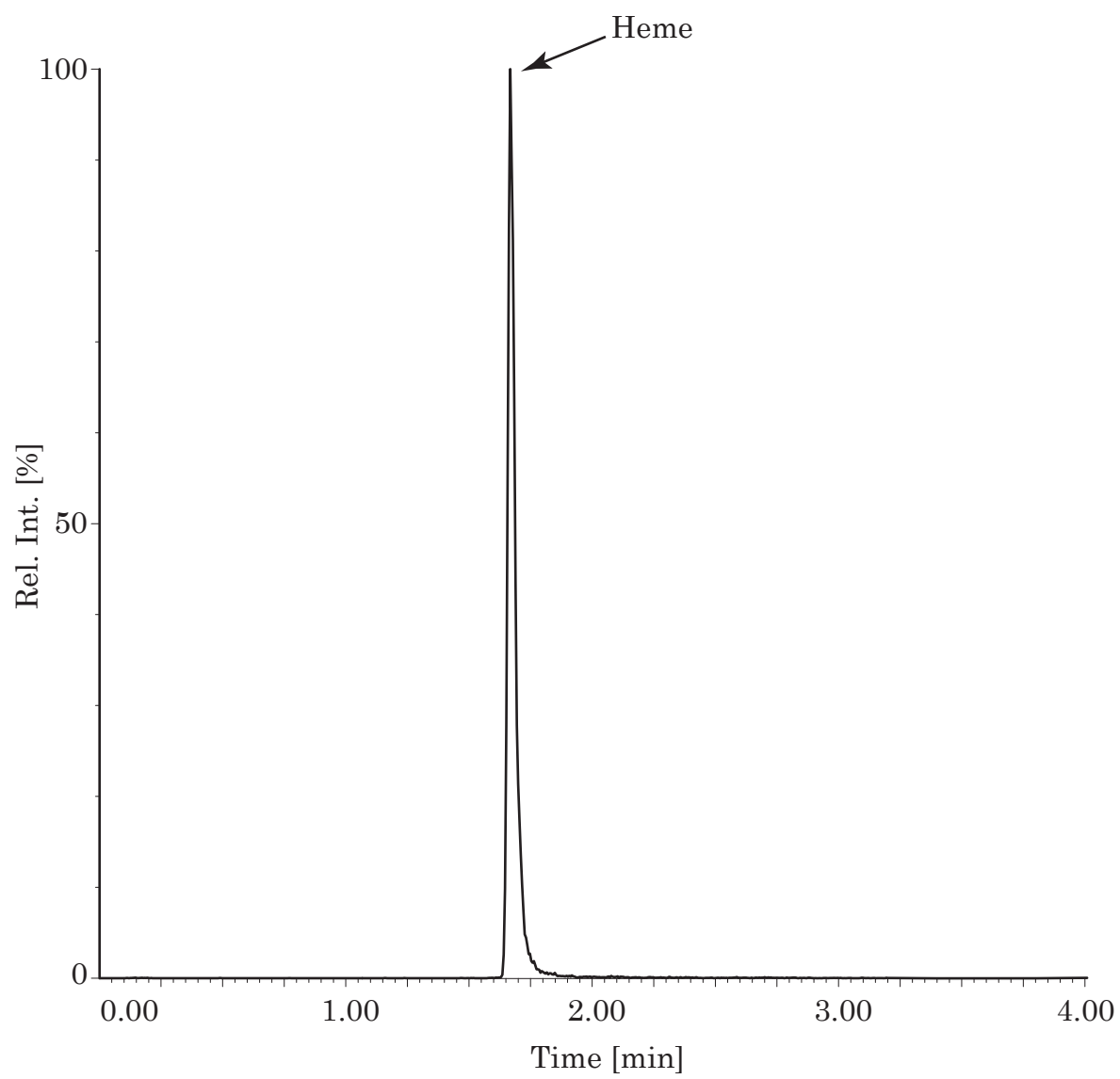


Fig. S2 Total ion chromatogram of *S. cerevisiae* extract

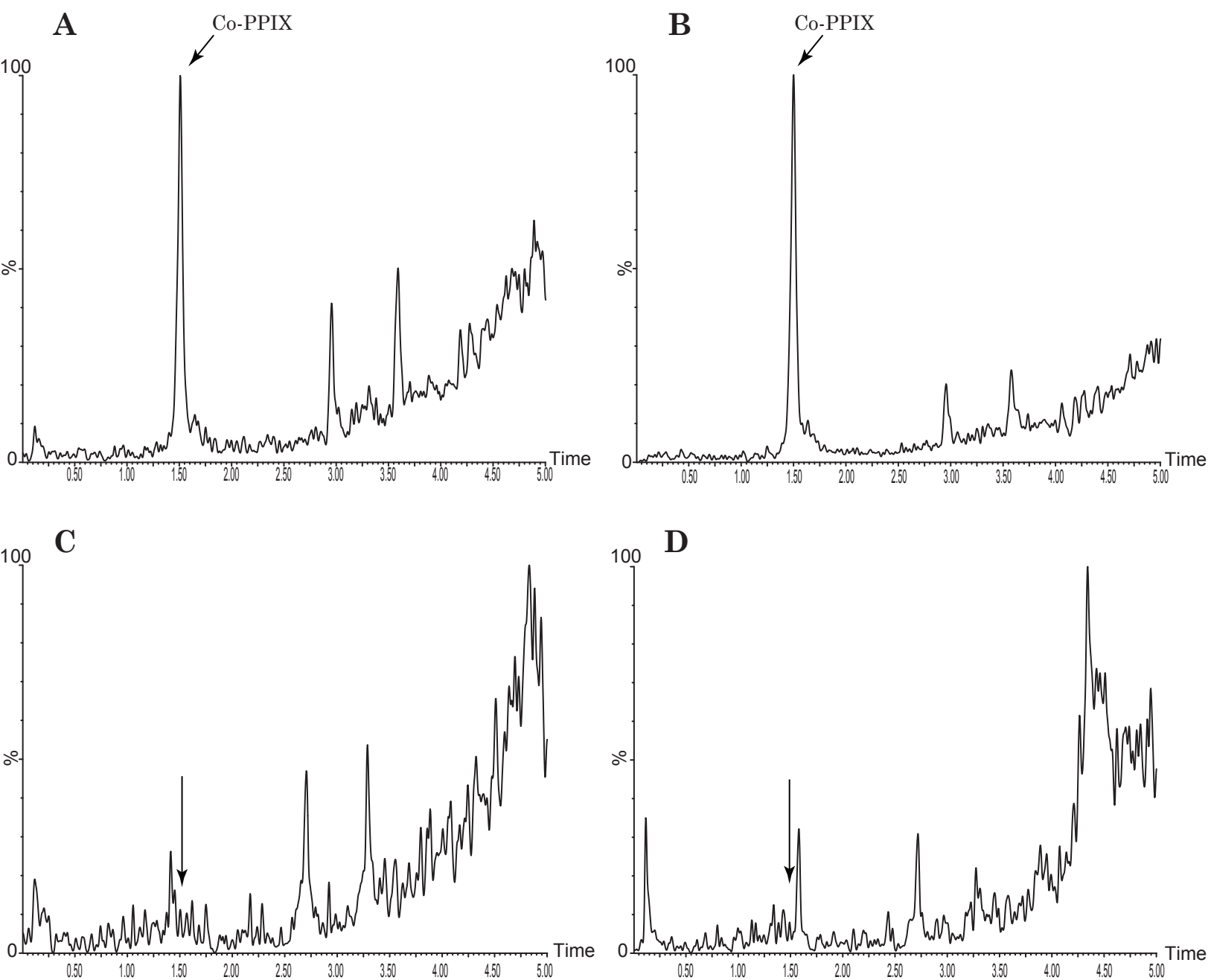


Fig. S3 Extracted ion chromatogram comparisons of Co-PPIX (m/z 618.4 Da) from four individual *E. coli* extracts where different additives have been added to the growth medium; (A) cobalt protoporphyrin IX, (B) hemin and cobalt protoporphyrin IX, (C) 5-aminolaevulinic acid and (D) hemin. The arrows in chromatograms (C) and (D) show the retention time for Co-PPIX