SUPPORTING INFORMATION

Endogenous insertion of non-native metalloporphyrins into human membrane cytochrome P450 enzymes

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List of Material Included:

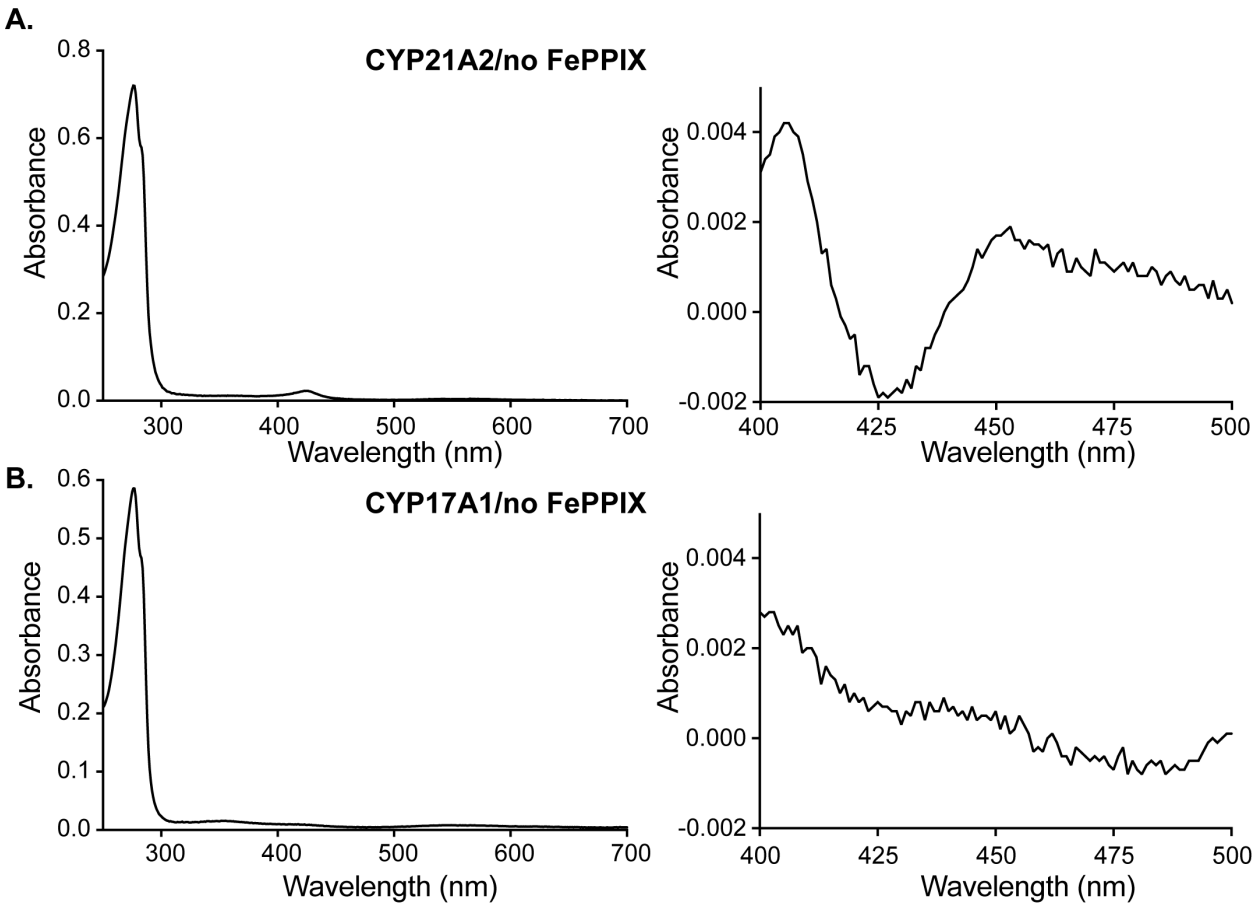

Figure S1. Absolute (left) and reduced-carbon monoxide difference (right) spectra of A) CYP21A2 and B) CYP17A1 expressed in iron-depleted minimal media without supplementation by FePPIX suggests that any Fe contamination that might remain under these conditions is not significantly incorporated into P450 enzyme

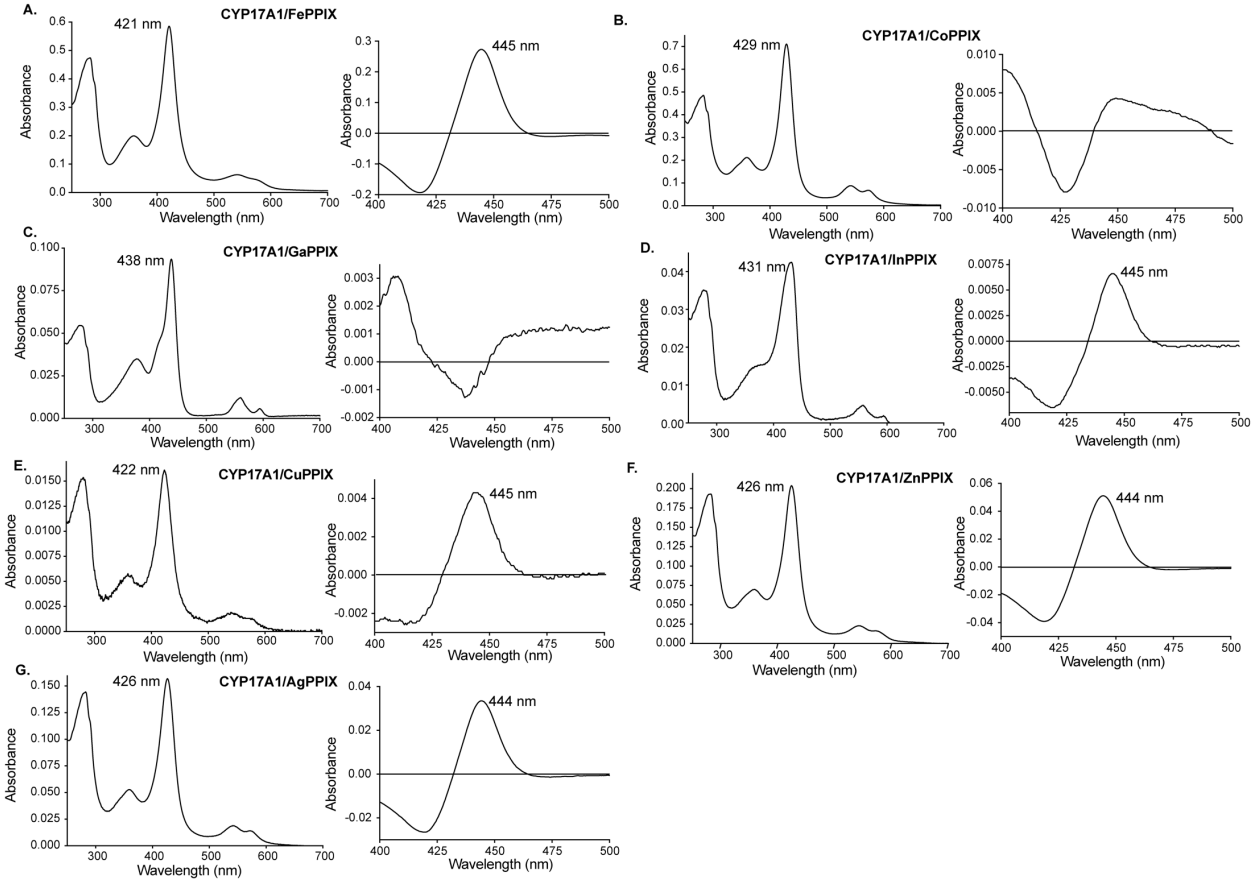

Figure S2. Absolute (left) and carbon monoxide difference spectra (right) of ^{15}N-CYP17A1 expressed in the presence of abiraterone inhibitor and exogenous PPIX: (A) FePPIX (B) CoPPIX (C) GaPPIX, (D) InPPIX, (E) CuPPIX, (F) ZnPPIX, and (G) AgPPIX. Panels A and B are CYP17A1 wild-type and C-G are CYP17A1/A105L mutant as described in the text. The reference CYP17A1/FePPIX/abiraterone data from figure 1H is repeated here as panel A to facilitate reader comparisons.

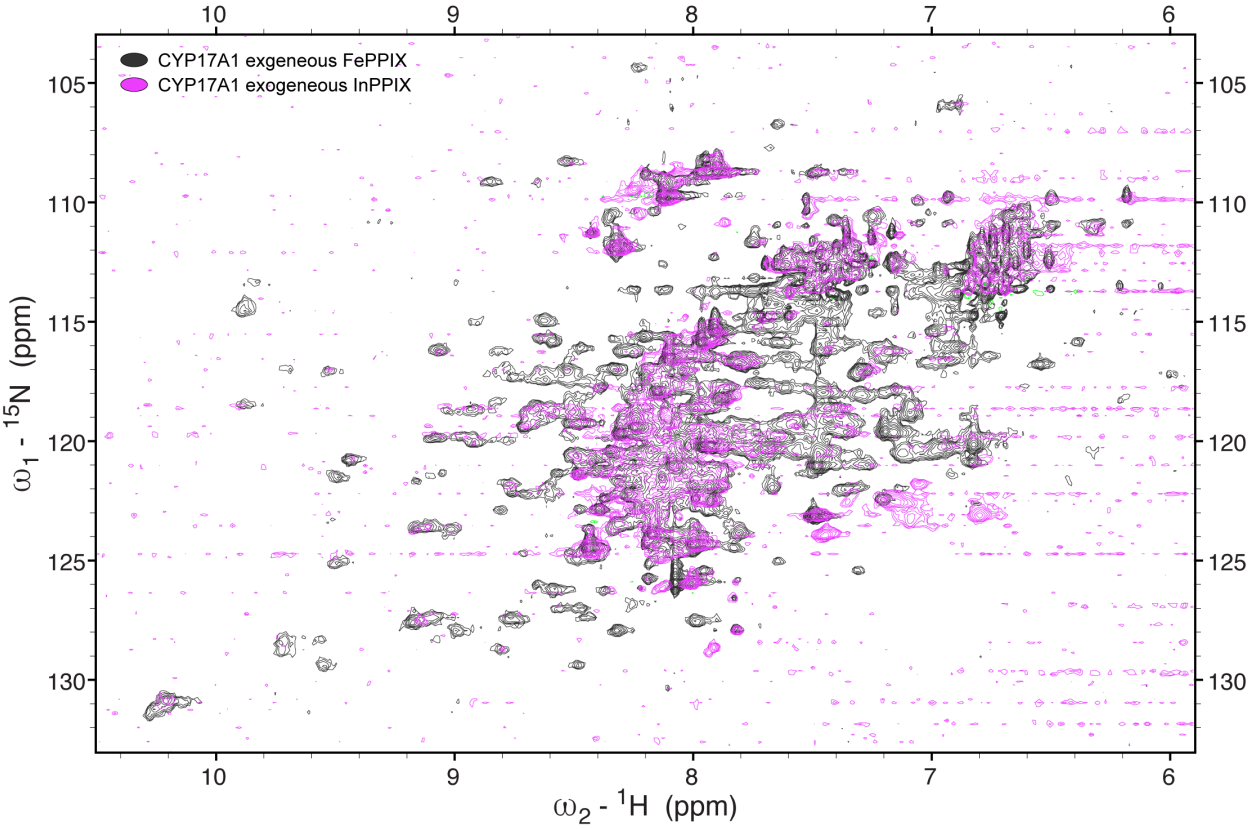

Figure S3. Comparison of ^{1}H-^{15}N TROSY-HSQC spectra of CYP17A1 expressed with exogenous FePPIX supplementation (grey) vs. exogenous InPPIX (purple) reveals that the InPPIX sample overlays well, but is missing many of the dispersed resonances and thus is suboptimal for NMR purposes.