Hepatic Transcript Profiles of Cytochromes P450 Genes Predict Sex Differences in Drug Metabolism

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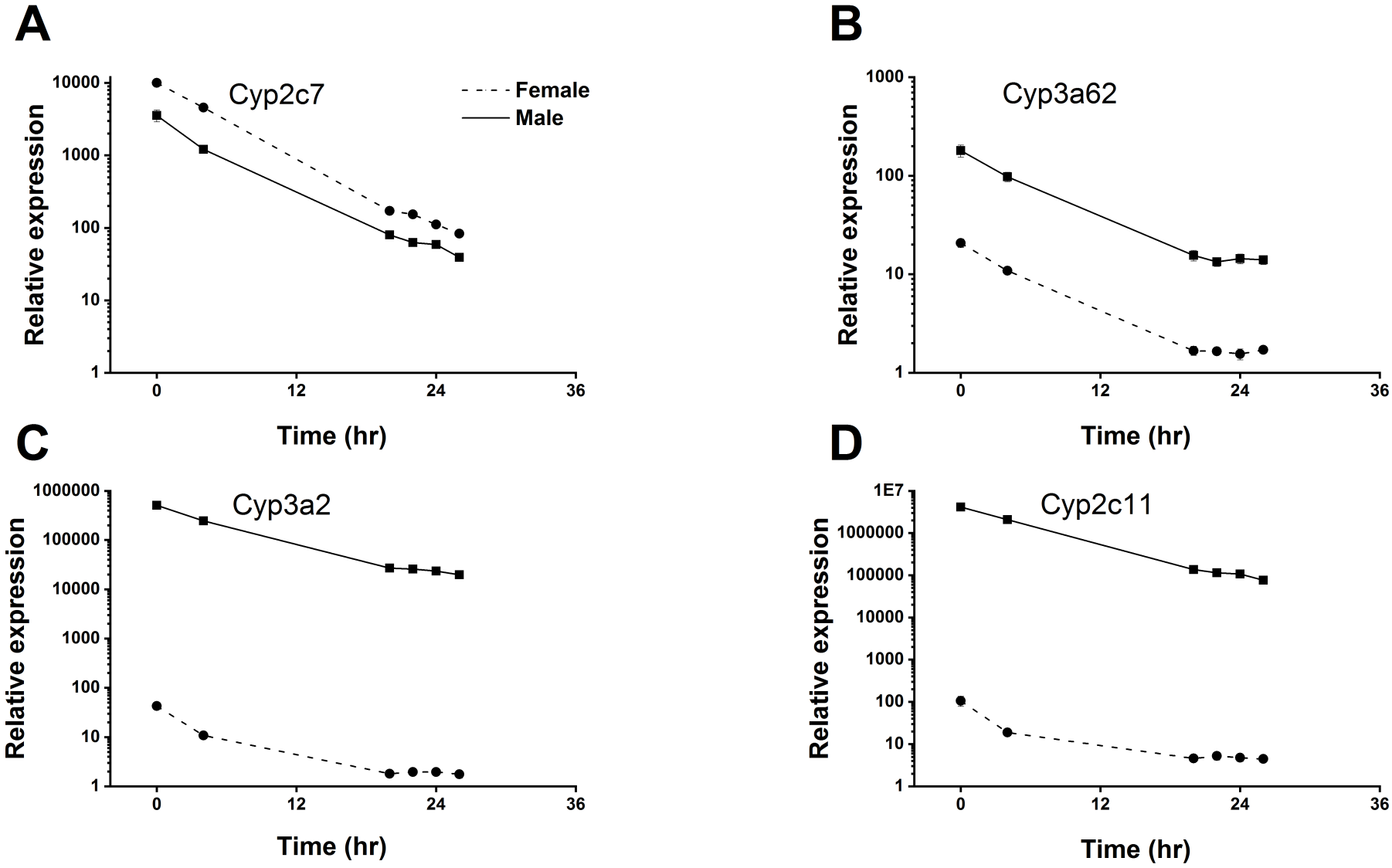
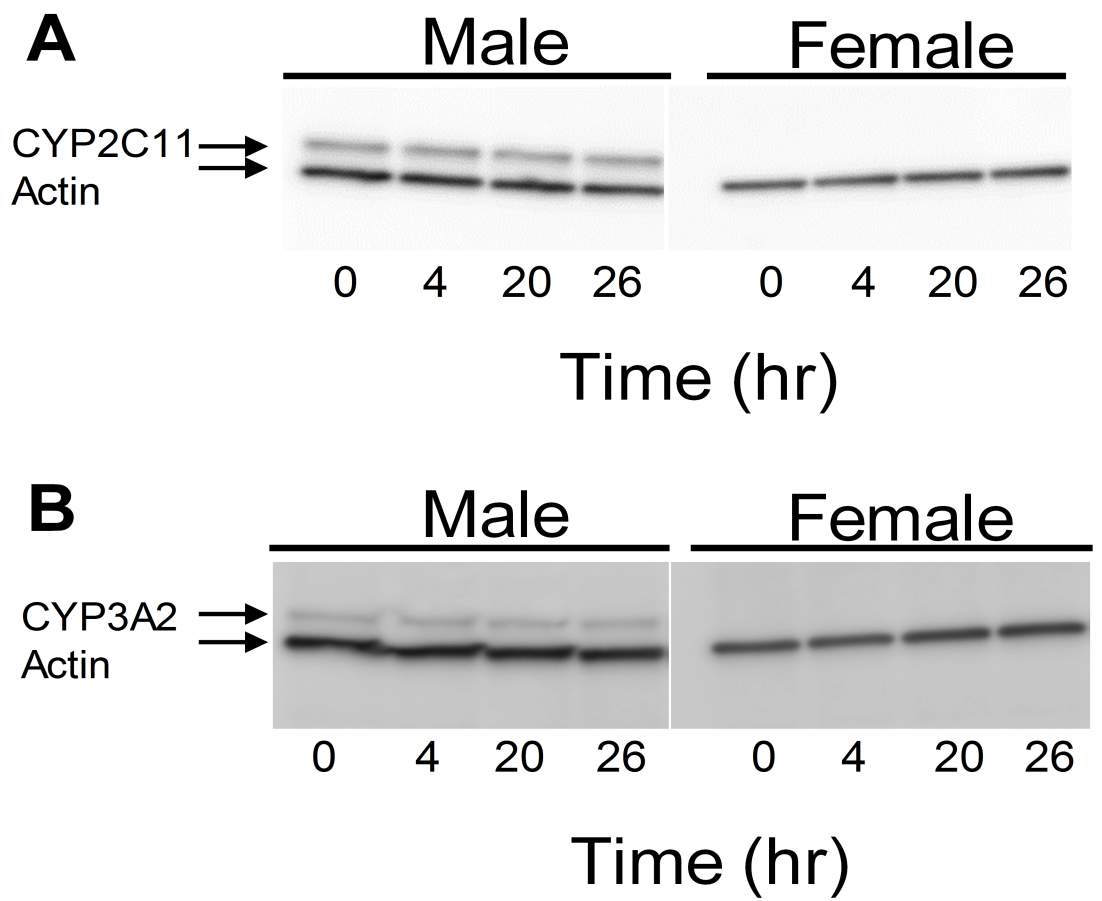
Drug Metabolism and Disposition



Supplemental Figure 1. Real-time quantitative PCR measurement of Cyp mRNAs in untreated cultures of attached primary hepatocytes derived from male (solid line) and female (dashed line) F344 rats. (A) Cyp2c7, (B) Cyp3a62, (C) Cyp3a2, and (D) Cyp2c11 were measured at 0, 4, 20, 22, 24 and 26 hr of culture. Measurements were normalized to the lowest measured value for each Cyp and expressed as relative expression. Cyp mRNA levels were quantified in hepatocytes from 3 males and 3 females, and all measurements were made in duplicate. The average and standard error of the mean are shown for both male and female at each culture time. Males and females expressed significantly different levels of mRNA coding for Cyp2c7 ($p<0.01$), Cyp3a62 ($p<0.01$), Cyp3a2 ($p<0.01$), and Cyp2c11 ($p<0.01$) by Student's t- test at each time.



Supplemental Figure 2. Western blot analysis of CYP proteins in untreated cultures of attached primary hepatocytes derived from male and female F344 rats. (A) CYP2C11 and (B) CYP3A2, along with a control protein, actin, were measured at 0, 4, 20, and 26 hr of culture. CYP proteins levels were measured in hepatocytes from 3 males and 3 females, and representative blots are shown.