Title: Substituted Imidazole of 5-Fluoro-2-[4-[(2-phenyl-1H-imidazol-5-yl)methyl]-1-piperazinyl]pyrimidine Inactivates Cytochrome P450 2D6 by

Protein Adduction

Authors: Nagy, Mocny, Diffenderfer, Hsi, Butler, Arthur, Fletke, Palamanda, Nomeir, Furge

Journal: Drug Metabolism and Disposition

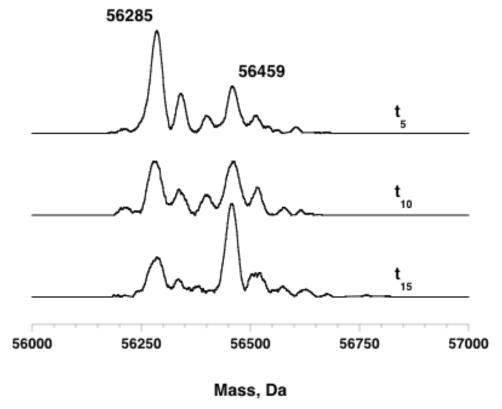


Figure S5. Deconvolution of ESI-LC-MS data for CYP2B4 inactivation by 4-tert-butylphenylacetylene (tBPA). For a positive control for MS analysis of adducted P450, a sample of purified, recombinant CYP2B4 (1 μM) was reconstituted with P450 reductase and lipids as described in the Materials and Methods for reconstitution of CYP2D6. Reactions were initiated by addition of NADPH (1 mM), continued at 37 °C for 5, 10, and 15 minutes, and stopped by placing samples on ice. An aliquot of each reaction was directly injected on the ESI-LC-MS as described in the Materials and Methods. Deconvolution revealed the presence of adducted CYP2B4 within 5 min that continued until adduction was essentially complete at 15 min consistent with the addition of one tBPA (174 amu). These observations are as reported previously by Zhang et al. and confirm our experimental methods (note, the construct for CYP2B4 used in these experiments was different that that used by Zhang et al. resulting in an increase in CYP2B4 apoprotein initial mass).