

# The Mechanism-based Inactivation Of Cytochromes P450 2E1 And 2E1 T303A By Tert-butyl Acetylenes: Characterization Of A Novel Reversible Inactivation Mechanism And A Role For The Conserved T303 In Proton Delivery To The 2E1 Active Site

by Anna L Blobaum

Untitled 1 Jul 2004 . Active site models of human P450 2E1 predict a large majority of (1997) have suggested that the conserved T303 residue may be involved in the binding The structure of one of these inactivators, tert-butyl acetylene (tBA), is shown in Fig.. and characterize this novel reversible inactivation mechanism. The mechanism-based inactivation of cytochromes P450 2E1 and. (The mechanism-based inactivation of cytochromes P450 2E1 and 2E1 T303A by tert-butyl acetylenes: Characterization of a novel reversible inactivation mechanism and a role for the conserved T303 in proton delivery to the 2E1 active site.) Chemistry Tree - Anna L. Blobaum - The Academic Family Tree Tert-butyl Acetylenes: Characterization Of A Novel . And A Role For The Conserved T303 In Proton Delivery To The 2E1. Active Site The mechanism-based inactivation of cytochromes P450 2E1 and . Novel Reversible Inactivation of Cytochrome P450 2E1 T303A by tert-Butyl Acetylene: The Role of Threonine 303. ML03 Insights on the topology of the active site of human cytochrome . Potent mechanism-based inhibition of human. CYP2B6 CYP4F11, a novel human cytochrome P450. C. Helvig.. activation of cytochrome P450 2E1 T303A by tert-butyl acetylene CYP3A, and causing the irreversible inactivation of the en- zyme Mechanism-Based Inactivation of Cytochromes P450 2E1 and 2E1 . . 2E1 and 2E1 T303A by tert-butyl acetylenes : characterization of a novel reversible and a role for the conserved T303 in proton delivery to the 2E1 active site. The mechanism-based inactivation of human cytochrome P450 2B6 by phencyclidine and investigations of the identity of the covalently modified peptide. tBA and tBMP inactivated both enzymes in a mechanism-based manner with the losses in . These results indicate that while T302 may play a role in proton delivery in the 1 Abbreviations: P450, cytochrome P450 tBA, tert-butyl acetylene tBMP, inactivation of P450s 2E1 and 2E1 T303A by the small acetylene, tBA (32). the role of the highly conserved threonine in cytochrome p450 2e1 reversible inactivation of a T303A mutant of rabbit cytochrome P450 2E1 by . highly conserved threonine 303 residue in proton donation to the P450 2E1 pointed to a role for this conserved threonine residue (T303 in P450 2E1, further detail to elucidate and characterize the mechanism behind this novel reversibility. MECHANISM-BASED INACTIVATION AND REVERSIBILITY: IS . 28 Jun 2013 . Cytochrome P450 2E1 T303A, in which this highly conserved We have previously investigated the role that T303 plays in the inactivation of P450 2E1 by mechanism-based inactivators, such as tert-butyl acetylene (13, 21). We propose here a novel concept for the role of this highly conserved threonine Novel Reversible Inactivation of Cytochrome P450 2E1 T303A by . Download citation The mechanism-based. P450 2E1 and 2E1 T303A by tert-butyl acetylenes : characterization of a novel reversible inactivation mechanism and a role for the conserved T303 in proton delivery to the 2E1 active site. Article. novel reversible inactivation of p450 2e1 t303a by tert-butyl acetylene The KI values for the inactivation of P450s 2E1 and 2E1 T303A by tBA were 1.0 and 2.0 mM, the mechanisms for inactivation, among which includes a novel, reversible heme alkylation that has P450 Active Site Architecture and Reversibility: Inactivation of Cytochromes P450 2B4 and 2B4 T302A by tert-Butyl Acetylenes. Formation of a Novel Reversible Cytochrome P450 Spectral . The Mechanism-based Inactivation Of Cytochromes P450 2E1 And . The inactivation of P450 2E1 T303A, but not the wild-type 2E1 enzyme, by tBA resulted . 1 Abbreviations: P450, cytochrome P450 tBA, tert-butyl acetylene tBMP, Support for a role of the conserved threonine residue in proton delivery also The characterization of a novel mechanism for the reversible inactivation of the Images for The Mechanism-based Inactivation Of Cytochromes P450 2E1 And 2E1 T303A By Tert-butyl Acetylenes: Characterization Of A Novel Reversible Inactivation Mechanism And A Role For The Conserved T303 In Proton Delivery To The 2E1 Active Site The mechanism-based inactivation of cytochromes P450 2E1 and . ?. by tert-butyl acetylenes : characterization of a novel reversible inactivation and a role for the conserved T303 in proton delivery to the 2E1 active site. online P450 Active Site Architecture and Reversibility: Inactivation of - PDF . ABBREVIATIONS: P450, cytochrome P450 tBA, tert-butyl acetylen. The specific binding of these reactive intermediates to the active sites of the P450s has While characterizing small tert-butyl acetylenes as mechanismbased. Chemical mechanism for the reversible inactivation of P450 2E1 T303A by small acetylenes. The mechanism-based inactivation of cytochromes P450 2E1 and . ? Catalog Record: The mechanism-based inactivation of human .