

Inhibition of Enzymatic Reactions. A Rapid Method to Determine the Index pI_{50}

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Z. Naturforsch. **57c**, 496–499 (2002); received December 5, 2001/February 25, 2002

Enzyme, Inhibition, Index pI_{50}

The activity of every substance I inhibiting an enzymatic reaction can be approximately evaluated by the index pI_{50} . This paper describes a simple and fast method of estimate and/or determination of this index. The method is based on the linearity of the dependence of the ratio of reaction rates of uninhibited and inhibited reaction vs. concentration of the inhibitor at constant initial substrate and enzyme concentrations for fully competitive, non-competitive, uncompetitive and mixed type of inhibition by the one inhibitor. The validity of the method is demonstrated by four inhibitors of hydrolysis of acetylthiocholine by butyrylcholine esterase.