

***In vitro* Inhibition of Cholinesterases by Carbamates – A Kinetic Study**

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Kinetics and mechanism of *in vitro* hydrolyses of acetylcholine and acetylthiocholine by carbamates were studied in a batch reactor at 25 °C, pH 8, and ionic strength of 0.11 M. Every hydrolysis was monitored by 3–4 independent methods. All studied hydrolyses can be described by the model of competitive inhibition with an irreversible step (k_3). A table of obtained average values of rate constants and discussion of the results are given.

Key words: Acetylcholine, Hydrolysis, Kinetics, Cholinesterases