

Effects of newly synthesized derivatives of caffeine-8- α -methyl thioglycolic acid on the activity of human recombinant MAOB enzyme

New series of caffeine-8- α -methyl thioglycolic acid derivatives (at concentration 1 μ M) were investigated for possible inhibiting effects on human recombinant MAOB enzyme (hMAOB). hMAOB is responsible for the formation of the neurotoxic reactive metabolites. Its inhibition could be one of the mechanisms for possible neuroprotection against some neurodegenerative disease, including Parkinson's and Alzheimer's disease. Monoamine oxidase activity assay of recombinant human MAOB was performed using a fluorometric method by Amplex UltraRed reagent. Tyramine hydrochloride was used as substrate. The effects of the compounds were compared with Selegiline (at concentration 1 μ M). All the compounds didn't revealed statistically significant inhibitory activity on the hMAOB enzyme.

Biography

Elena Smilyanova is pursuing her Pharmacy in Medical University of Sofia. She has deep interest in the sphere of Pharmacology and Toxicology. She has been keen on participating into in vitro and in vivo experiments and has contributed to gathering a deep knowledge on the following and similar topics.

elena.smilianova@abv.bg

Elena Smilyanova,
Magdalena Kondeva-Burdina,
Javor Mitkov and Alexander Zlatkov
Medical University-Sofia, Bulgaria

Notes: