

# Hydrazones of 4-(Trifluoromethyl)benzohydrazide as New Inhibitors of Acetyl- and Butyrylcholinesterase

Martin Krátký <sup>1,\*</sup>, Katarína Svrčková <sup>2</sup>, Quynh Anh Vu <sup>1</sup>, Šárka Štěpánková <sup>2</sup>, and Jarmila Vinšová <sup>1</sup>

<sup>1</sup> Department of Organic and Bioorganic Chemistry, Faculty of Pharmacy in Hradec Králové, Charles University, Akademika Heyrovského 1203, 500 05 Hradec Králové, Czech Republic; vuq@faf.cuni.cz (Q.A.V.); vinsova@faf.cuni.cz (J.V.)

<sup>2</sup> Department of Biological and Biochemical Sciences, Faculty of Chemical Technology, University of Pardubice, Studentská 573, 532 10 Pardubice, Czech Republic; katarina.svrckova@upce.cz (K.S.); sarka.stepankova@upce.cz (Š.Š.)

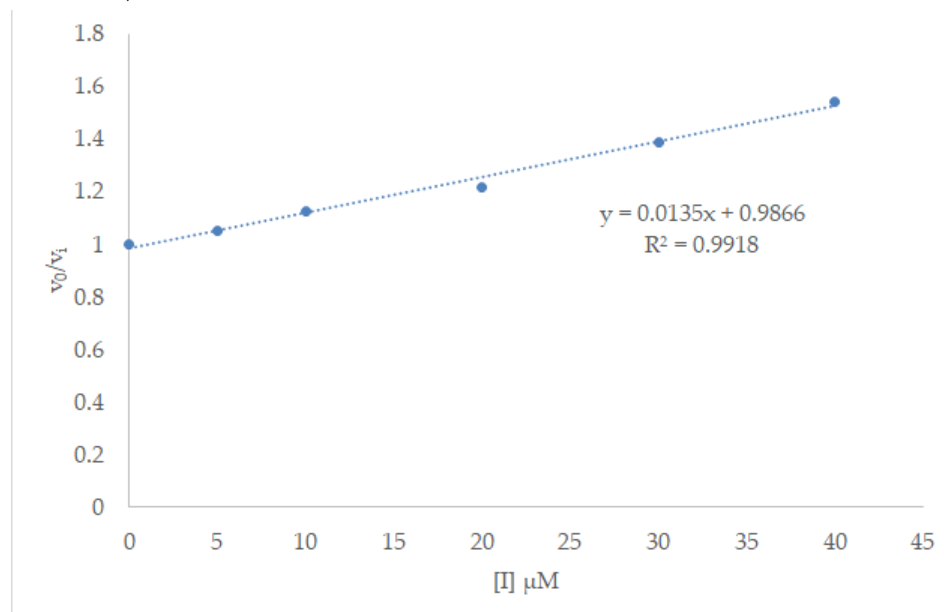
## Supplementary Material Content

- I. Table S1.** Kinetic parameters for **2I** inhibiting eeAChE calculated from L-B plot S2
- II.** Representative figures (**S1-S4**) reporting IC<sub>50</sub> determination (dependence  $v_0/v_i$  vs. concentration of selected inhibitors) of selected inhibitors for eeAChE S2-S3
- III.** Representative figures (**S5 and S6**) reporting IC<sub>50</sub> determination (dependence  $v_0/v_i$  vs. concentration of selected inhibitors) of selected inhibitors for eqBuChE S4

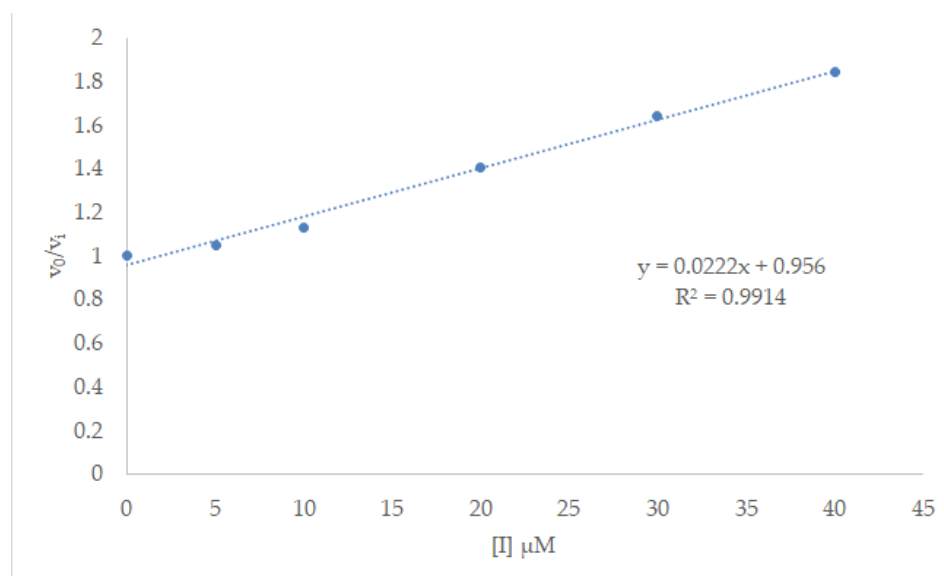
**I. Table S1.** Kinetic parameters for **2l** inhibiting eeAChE calculated from L-B plot

c(I) $\mu\text{M}$	$K_M$ (mM)	$V_m$ ( $\text{s}^{-1}$ )
0	0.85	0.32
10	0.69	0.23
20	0.66	0.19
30	0.64	0.16
40	0.64	0.14

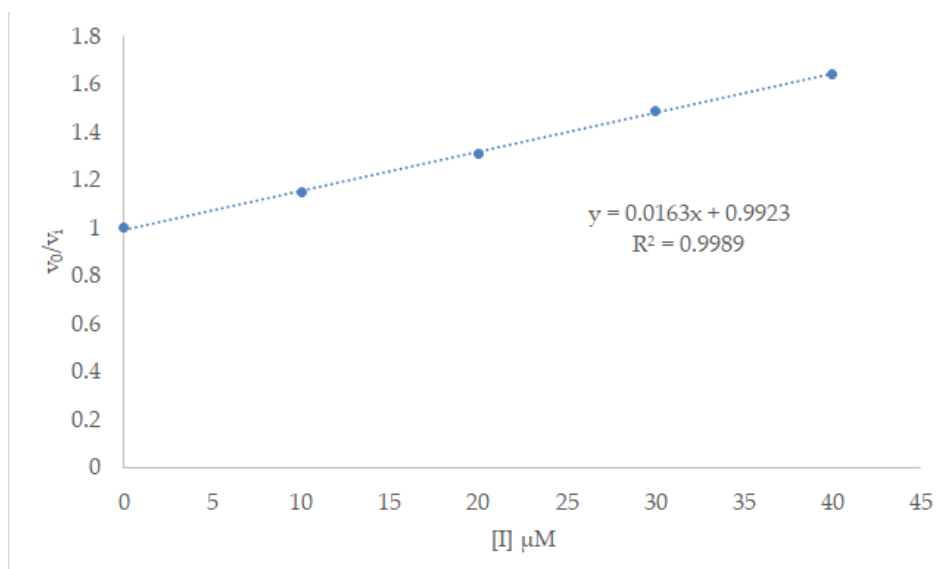
**II.** Representative figures reporting  $\text{IC}_{50}$  determination (dependence  $v_0/v_i$  vs. concentration of selected inhibitors) of selected inhibitors for eeAChE



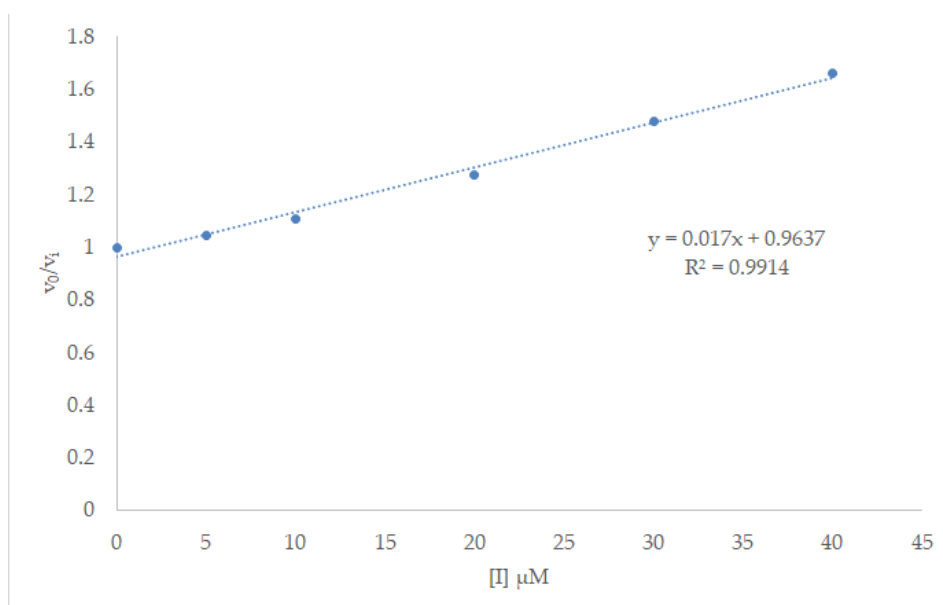
**Figure S1.** The dependence  $v_0/v_i$  vs. concentration of **2a** inhibiting eeAChE. Data are the average values from three different experiments.



**Figure S2.** The dependence  $v_0/v_i$  vs. concentration of **2g** inhibiting eeAChE. Data are the average values from three different experiments.

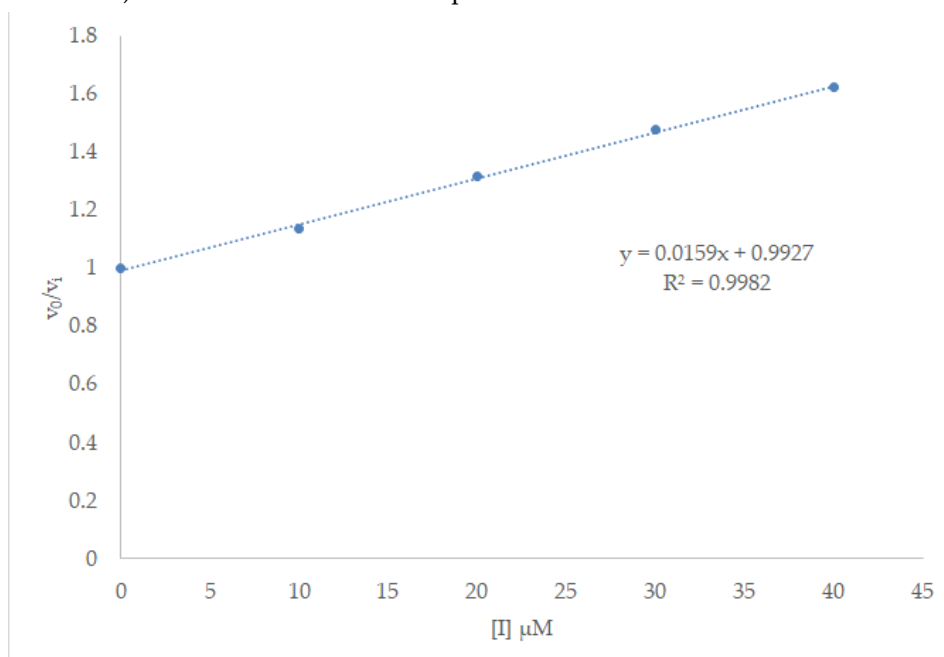


**Figure S3.** The dependence  $v_0/v_i$  vs. concentration of **2k** inhibiting eeAChE. Data are the average values from three different experiments.

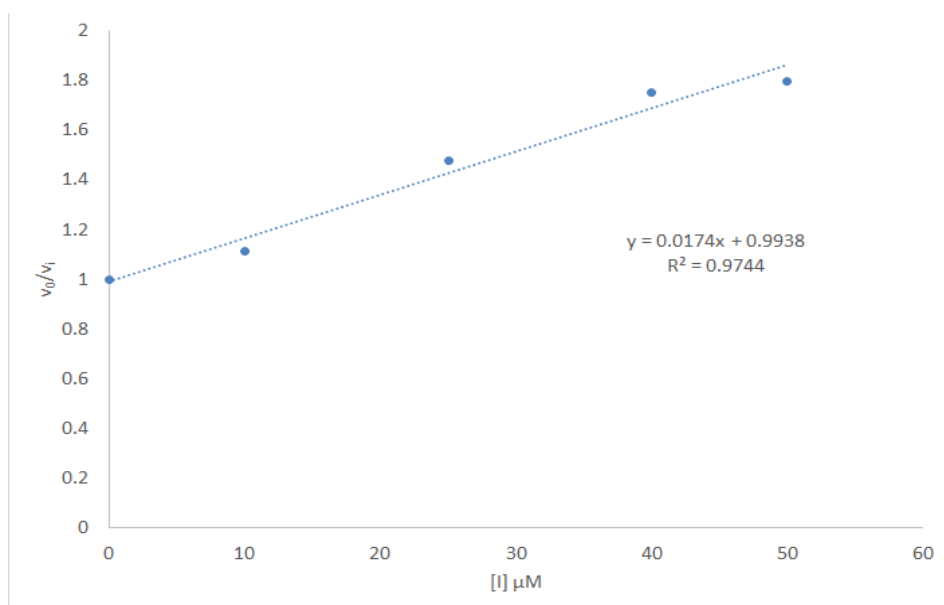


**Figure S4.** The dependence  $v_0/v_i$  vs. concentration of **3c** inhibiting eeAChE. Data are the average values from three different experiments.

**III. Representative figures reporting IC<sub>50</sub> determination (dependence  $v_0/v_i$  vs. concentration of selected inhibitors) of selected inhibitors for eqBuChE**



**Figure S5.** The dependence  $v_0/v_i$  vs. concentration of **2d** inhibiting eqBuChE. Data are the average values from three different experiments.



**Figure S6.** The dependence  $v_0/v_i$  vs. concentration of **3d** inhibiting eqBuChE. Data are the average values from three different experiments.