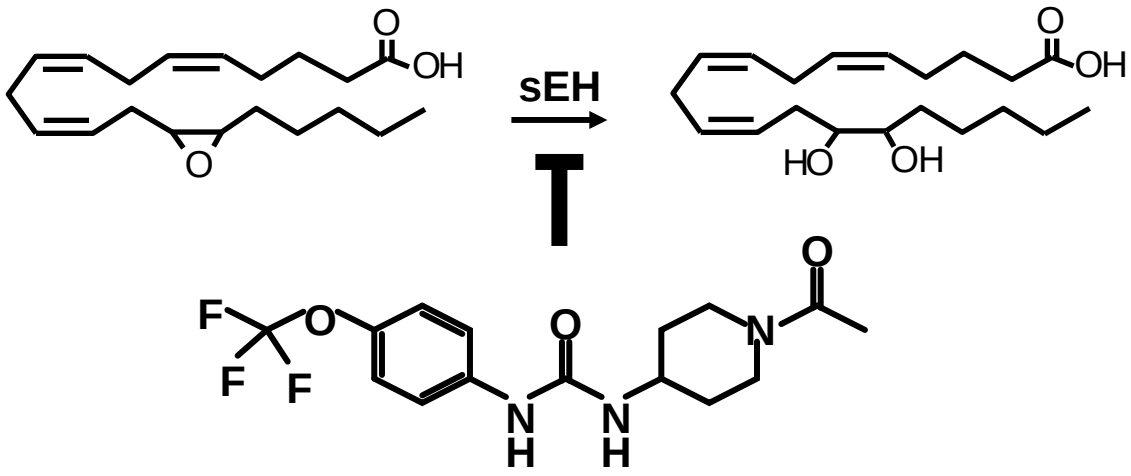
14,15 EET **14,15 DHET**



TPAU

Supplementary information

Figure S1. The soluble epoxide hydrolase (sEH) converts epoxyeicosanoic acids EETs to dihydroxyeicosatrienoic acids (DHETs) by catalytically introducing a water molecule and opening the epoxy function to a vicinal diol. Shown here is the chemical structure of a representative epoxyeicosatrienoic acid, 14,15-EET, with conversion to 14,15-DiHET. This reaction, and hydrolysis of other epoxygenated regioisomers 5,6-, 8,9- and 11,12-EET, is inhibited by sEH inhibitors including (1-trifluoromethoxyphenyl-3-(1-acetylpiperidin-4-yl) urea) (TPAU) whose chemical structure is displayed below. Inhibition of sEH leads to stabilization of the EET regioisomers and other epoxygenated fatty acids and increases their plasma levels.