Target Name	Carbonic anhydrase IV
Target TTD ID	TTDR00209

Target Species	Human
Chemical Type	Sulfonamides incorporating β-alanyl moieties
Mode of Action	Inhibitor
QSAR Model 1	$\log K_I(\text{hCA IV}) = 2.7452 - 0.1811(\pm 0.0250)\ {}^1\chi + 0.5123(\pm 0.1866)J - 0.8039(\pm 0.1300)\ IP_1 - 0.9189(\pm 0.1161)IP_2 + 0.2796(\pm 0.2052)IP_3$ $n = 49,\ \text{S.E.} = 0.3080,\ R = 0.9077,\ R^2{}_A = 0.8034,\ F = 40.223$
Molecular Descriptor 1	Access the following web-servers to compute molecular descriptors: **MoDel** and **e-dragon** log *K*, logarithm of binding constant (*K*); ${}^1x$, Randic connectivity index; *J*, Balaban index; IP_1, IP_2 and IP_3, indicator parameter for the presence (=1) or absence (=0) of halogen, five-member ring and methyl group respectively; *n*, number of compounds; S.E., standard error of estimation; R, multiple correlation coefficient; R_A^2, adjustable R^2; *F*, Fishers statistics
Reference	QSAR study on carbonic anhydrase inhibitors: water-soluble sulfonamides incorporating b-alanyl moieties, possessing long lasting-intra ocular pressure lowering properties—a molecular connectivity approach. *European Journal of Medicinal Chemistry* 40 (2005) 1002–1012