Therapeutic Targets Database



QSAR Model

Target Name	CYP19
Target TTD ID	TTDS00252

Target Species	Human
Chemical Type	Benzcyclo derivatives
Mode of Action	Inhibitor
QSAR Model 1	$pIC50 = 3.875(\pm 0.425)HC_2 - 0.285(\pm 0.033)S_4 + 4.504(\pm 0.632)C_5 - 0.334(\pm 0.085)R'_{13} + 0.252(\pm 0.095)\log P + 2.455(\pm 0.317)$ $n = 36; R^2 = 0.874; EV = 85.3\%; F = 41.710; df = 5, 30;$ $s = 0.213; AVRES = 0.173; PRESS = 1.910; Q^2 = 0.824$
Molecular Descriptor	Access the following web-servers to compute molecular descriptors: <u>MoDel</u> and <u>e-dragon</u> HC ₂ is Huckel charge at atom C2. S ₄ is electrotopological state index of $\operatorname{atomC_4}$. R'_{13} is electronic charge at atom R'_{13} . log P denotes hydrophobicity of the molecule. The independent variables used in the model are not intercorrelated (R < 0.5).
Reference	Exploring benzcyclo derivatives as potent aromatase inhibitors using ligand-based modeling studies. <i>European Journal of Medicinal Chemistry</i> 45 (2010) 4307-4315