Therapeutic Targets Database



QSAR Model

Target Name	VEGF receptor I
Target TTD ID	TTDS00007

Target Species	Human
Chemical Type	N- (Aryl)-4-(Azolylethyl) Thiazole-5-Carboxamides
Mode of Action	Agonist
Activity Type	VEGFR inhibitory activity
QSAR Model 1	$\begin{split} BA &= [9.20894 \ (\pm \ 0.694867)] + I_1 \ [-1.21417 \ (\pm \ 0.190454)] \\ &+ Xv \ (P)(5) \ [-1.49191 \ (\pm \ 0.317222)] \\ n &= 16, \ r &= 0.968464, \ r^2 &= 0.937922, \ std &= 0.125256, \ F &= 98.2067, (F_{(2,13)} = \ 6.36), \\ Q^2 &= \ 0.897918, \ S_{PRESS} = \ 0.160621, \ S_{DEP} = \ 0.144782 \end{split}$
Molecular Descriptor	Access the following web-servers to compute molecular descriptors: MoDel and e-dragon I ₁ , indicator variable given for the presence of isoxazole nucleus in the structure; Xv (P)(5), fifth order path type valence connectivity indices; n, number of data points; r, correlation coefficient; r ² , squared correlation coefficient; std, standard deviation; F, Fischer ratio between the variances of calculated and observed activities; Q ² , cross validated squared correlation coefficient; SPRESS and SDEP, standard deviation based on predicted residual sum of squares and standard deviation of error of prediction respectively; Topological and physicochemical descriptors were calculated using QSAR software Modeslab electronic descriptors were calculated on the Chem3D software using the "Compute Properties Module"; <i>n</i> is number of data points, <i>r</i> is correlation coefficient, <i>r²</i> is squared correlation coefficient, std is standard deviation, F represents Fischer ratio between the variances of calculated and observed activities.

	Reference	QSAR study on N- (Aryl)-4-(Azolylethyl) Thiazole-5-Carboxamides: Novel Potent Inhibitors of
Kelefence	VEGF Receptors I and II. Medicinal Chemistry, 2009, 5, 455-461	