

Target Name	VLA-4
Target TTD ID	TTDS00445

Target Species	Human
Chemical Type	Piperazinyl phenylalanine derivatives
Mode of Action	Inhibitor
QSAR Model 1	$-\log IC_{50} = [2.93] + SaaNEindex [-0.037] + SsClcount [0.77] + 4path\ count [0.064] + SlogP [-0.69]$ <p>n=21, r=0.93, r²=0.8567, r² se=0.25, F=33.89, F tabulated=7.46, q²=0.76, q² se=0.33, pred_r²=0.42, pred_r² se=0.24, degree of freedom=17</p>
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>SaaNEindex, electro-topological state indices for number of nitrogen atoms connected with two aromatic double bonds; SsClcount, electro-topological parameter defining total number of chlorine atoms connected with one single bond; 4pathcount, topological parameter signifying total number of fragments of fourth order (four bond path) in compound; SlogP, signify log of the octanol/water partition coefficient; n, number of samples, r, correlation coefficient; r² se, standard error of squared correlation coefficient; F, F-ratio; F tabulated, tabulated F-ratio; q², square of the correlation coefficient; q² se, standard error of square of the correlation coefficient; pred r², predicted squared correlation coefficient; pred r² se, standard error of predicted squared correlation coefficient.</p>
Reference	Quantitative Structure Activity Relationship Studies of Piperazinyl Phenylalanine Derivatives as VLA-4/VCAM-1 Inhibitors. <i>Medicinal Chemistry</i> , 2009, 5, 446-454