

Target Name	Nicotinic acetylcholine receptor
Target TTD ID	TTDS00303

Target Species	Human
Chemical Type	Caracurine V analogues
Mode of Action	Ligand
QSAR Model 1	$p\hat{K}_i = 3.0387 + 0.1025 \cdot DsDs_3 - 0.0032 \cdot AA_9 - 0.0164 \cdot DsH_3 + 0.0202 \cdot DsDs_4$ $R_{CV-1}^2 = 0.73, \quad RMSEP_{CV-1} = 0.39, \quad R_{CV-40\%}^2 = 0.69, \quad RMSEP_{CV-40\%} = 0.42, \quad R^2 = 0.77,$ $RMSEC = 0.38, \quad m = 33, \quad LV = 3$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>R_{CV-1}^2 (also known as q^2) and $R_{CV-40\%}^2$ are the leave-one-out and leave-40%-out cross-validated squared multiple correlation coefficients, and $RMSEP_{CV-1}$ and $RMSEP_{CV-40\%}$ are the respective root-mean squared errors of prediction. R^2 is the coefficient of determination, RMSEC is the root mean squared error of calibration (also known as s), m is the number of molecules and LV is the number of principal components.</p> <p>'Ds', 'A' and 'H', describe surface points with strong H-bond donor, H-bond acceptor and hydrophilic properties, respectively.</p> <p>$DsDs_3$ and $DsDs_4$ describe the presence or absence of the allyl alcohol group and DsH_3 discriminates between compounds with one and two allyl alcohol moieties.</p>
Reference	Bisquaternary caracurine V and iso-caracurine V salts as ligands for the muscle type of nicotinic acetylcholine receptors: SAR and QSAR studies. <i>Bioorganic & Medicinal Chemistry</i> 12 (2004) 6277–6285

Target Species	Human
Chemical Type	Iso-caracurine V analogues
Mode of Action	Ligand
QSAR Model 1	$p\hat{K}_i = 3.0387 + 0.1025 \cdot DsDs_3 - 0.0032 \cdot AA_9 - 0.0164 \cdot DsH_3 + 0.0202 \cdot DsDs_4$ $R^2_{CV-1} = 0.73, \quad RMSEP_{CV-1} = 0.39, \quad R^2_{CV-40\%} = 0.69, \quad RMSEP_{CV-40\%} = 0.42, \quad R^2 = 0.77,$ $RMSEC = 0.38, \quad m = 33, \quad LV = 3$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>R^2_{CV-1} (also known as q^2) and $R^2_{CV-40\%}$ are the leave-one-out and leave-40%-out cross-validated squared multiple correlation coefficients, and $RMSEP_{CV-1}$ and $RMSEP_{CV-40\%}$ are the respective root-mean squared errors of prediction. R^2 is the coefficient of determination, RMSEC is the root mean squared error of calibration (also known as s), m is the number of molecules and LV is the number of principal components.</p> <p>'Ds', 'A' and 'H', describe surface points with strong H-bond donor, H-bond acceptor and hydrophilic properties, respectively.</p> <p>$DsDs_3$ and $DsDs_4$ describe the presence or absence of the allyl alcohol group and DsH_3 discriminates between compounds with one and two allyl alcohol moieties.</p>
Reference	Bisquaternary caracurine V and iso-caracurine V salts as ligands for the muscle type of nicotinic acetylcholine receptors: SAR and QSAR studies. <i>Bioorganic & Medicinal Chemistry</i> 12 (2004) 6277–6285