

Target Name	MAO-A
Target TTD ID	TTDS00289

Target Species	Human
Chemical Type	Propargyl (clorgyline analogues)
Mode of Action	Inhibitor
QSAR Model 1	$i\text{-MAO-A} = -1.32\chi_1(C_{\text{sat}}) - 2.56\chi_2(\text{Het}) + 0.46\alpha_0(\text{Het}) + 1.69\alpha_1(\text{Het}) + 1.16MR_1 + 1.21$ $+ 7.12MR_2(C_{\text{unsat}}) - 1.71MR_0(\text{Het}) - 2.95 \cdot \log P_0 - 5.6 \cdot \log P_2(C_{\text{unsat}})$ $\lambda = 0.36 \quad F = 273.93 \quad p < 0.01$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>${}^k\chi(G)$: molecular or group electro-negativities; ${}^kMR(G)$: refractivities; ${}^k\alpha(G)$: polarizabilities; $\log{}^kP$: logarithms of water/<i>n</i>-octanol partition coefficients; <i>G</i>: atoms included in a specific group; i-MAO-A: MAO-A inhibitory activity score; <i>W</i>: Wilk's λ statistic; <i>F</i>: the Fisher ratio; <i>p</i>: the <i>p</i>-level.</p>
Reference	A QSAR Model for in Silico Screening of MAO-A Inhibitors. Prediction, Synthesis, and Biological Assay of Novel Coumarins. <i>J. Med. Chem.</i> 2006, 49, 1149-1156

Target Species	Human
Chemical Type	Benzamide (moclobemide analogues)
Mode of Action	Inhibitor

QSAR Model 1	$i\text{-MAO-A} = -1.32\chi_1(C_{\text{sat}}) - 2.56\chi_2(\text{Het}) + 0.46\alpha_0(\text{Het}) + 1.69\alpha_1(\text{Het}) + 1.16MR_1 + 1.21$ $+ 7.12MR_2(C_{\text{unsat}}) - 1.71MR_0(\text{Het}) - 2.95 \cdot \log P_0 - 5.6 \cdot \log P_2(C_{\text{unsat}})$ $\lambda = 0.36 \quad F = 273.93 \quad p < 0.01$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>${}^k\chi(G)$: molecular or group electro-negativities; ${}^kMR(G)$: refractivities; ${}^k\alpha(G)$: polarizabilities; $\log{}^kP$: logarithms of water/<i>n</i>-octanol partition coefficients; <i>G</i>: atoms included in a specific group; i-MAO-A: MAO-A inhibitory activity score; <i>W</i>: Wilk's λ statistic; <i>F</i>: the Fisher ratio; <i>p</i>: the <i>p</i>-level.</p>
Reference	A QSAR Model for in Silico Screening of MAO-A Inhibitors. Prediction, Synthesis, and Biological Assay of Novel Coumarins. <i>J. Med. Chem.</i> 2006, 49, 1149-1156

Target Species	Human
Chemical Type	Phenylethylamines
Mode of Action	Inhibitor
QSAR Model 1	$i\text{-MAO-A} = -1.32\chi_1(C_{\text{sat}}) - 2.56\chi_2(\text{Het}) + 0.46\alpha_0(\text{Het}) + 1.69\alpha_1(\text{Het}) + 1.16MR_1 + 1.21$ $+ 7.12MR_2(C_{\text{unsat}}) - 1.71MR_0(\text{Het}) - 2.95 \cdot \log P_0 - 5.6 \cdot \log P_2(C_{\text{unsat}})$ $\lambda = 0.36 \quad F = 273.93 \quad p < 0.01$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>${}^k\chi(G)$: molecular or group electro-negativities; ${}^kMR(G)$: refractivities; ${}^k\alpha(G)$: polarizabilities; $\log{}^kP$: logarithms of water/<i>n</i>-octanol partition coefficients; <i>G</i>: atoms included in a specific group; i-MAO-A: MAO-A inhibitory activity score; <i>W</i>: Wilk's λ statistic; <i>F</i>: the Fisher ratio; <i>p</i>: the <i>p</i>-level.</p>
Reference	A QSAR Model for in Silico Screening of MAO-A Inhibitors. Prediction, Synthesis, and Biological Assay of Novel Coumarins. <i>J. Med. Chem.</i> 2006, 49, 1149-1156

Target	Human
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Species	
Chemical Type	Indoles
Mode of Action	Inhibitor
QSAR Model 1	$i\text{-MAO-A} = -1.32\chi_1(C_{\text{sat}}) - 2.56\chi_2(\text{Het}) + 0.46\alpha_0(\text{Het}) + 1.69\alpha_1(\text{Het}) + 1.16MR_1 + 1.21$ $+ 7.12MR_2(C_{\text{unsat}}) - 1.71MR_0(\text{Het}) - 2.95 \cdot \log P_0 - 5.6 \cdot \log P_2(C_{\text{unsat}})$ $\lambda = 0.36 \quad F = 273.93 \quad p < 0.01$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>${}^k\chi(G)$: molecular or group electro-negativities; ${}^kMR(G)$: refractivities; ${}^k\alpha(G)$: polarizabilities; $\log{}^kP$: logarithms of water/<i>n</i>-octanol partition coefficients; <i>G</i>: atoms included in a specific group; i-MAO-A: MAO-A inhibitory activity score; <i>W</i>: Wilk's λ statistic; <i>F</i>: the Fisher ratio; <i>p</i>: the <i>p</i>-level.</p>
Reference	A QSAR Model for in Silico Screening of MAO-A Inhibitors. Prediction, Synthesis, and Biological Assay of Novel Coumarins. <i>J. Med. Chem.</i> 2006, 49, 1149-1156

Target Species	Human
Chemical Type	Coumarins
Mode of Action	Inhibitor
QSAR Model 1	$i\text{-MAO-A} = -1.32\chi_1(C_{\text{sat}}) - 2.56\chi_2(\text{Het}) + 0.46\alpha_0(\text{Het}) + 1.69\alpha_1(\text{Het}) + 1.16MR_1 + 1.21$ $+ 7.12MR_2(C_{\text{unsat}}) - 1.71MR_0(\text{Het}) - 2.95 \cdot \log P_0 - 5.6 \cdot \log P_2(C_{\text{unsat}})$ $\lambda = 0.36 \quad F = 273.93 \quad p < 0.01$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>${}^k\chi(G)$: molecular or group electro-negativities; ${}^kMR(G)$: refractivities; ${}^k\alpha(G)$: polarizabilities; $\log{}^kP$: logarithms of water/<i>n</i>-octanol partition coefficients; <i>G</i>: atoms included in a specific group; i-MAO-A:</p>

	MAO-A inhibitory activity score; W : Wilk's λ statistic; F : the Fisher ratio; p : the p -level.
Reference	A QSAR Model for in Silico Screening of MAO-A Inhibitors. Prediction, Synthesis, and Biological Assay of Novel Coumarins. <i>J. Med. Chem.</i> 2006, 49, 1149-1156

Target Species	Human
Chemical Type	Thioxanthenes
Mode of Action	Inhibitor
QSAR Model 1	$i\text{-MAO-A} = -1.32\chi_1(C_{\text{sat}}) - 2.56\chi_2(\text{Het}) + 0.46\alpha_0(\text{Het}) + 1.69\alpha_1(\text{Het}) + 1.16MR_1 + 1.21$ $+ 7.12MR_2(C_{\text{unsat}}) - 1.71MR_0(\text{Het}) - 2.95 \cdot \log P_0 - 5.6 \cdot \log P_2(C_{\text{unsat}})$ $\lambda = 0.36 \quad F = 273.93 \quad p < 0.01$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>${}^k\chi(G)$: molecular or group electro-negativities; ${}^kMR(G)$: refractivities; ${}^k\alpha(G)$: polarizabilities; $\log{}^kP$: logarithms of water/<i>n</i>-octanol partition coefficients; G: atoms included in a specific group; i-MAO-A: MAO-A inhibitory activity score; W: Wilk's λ statistic; F: the Fisher ratio; p: the p-level.</p>
Reference	A QSAR Model for in Silico Screening of MAO-A Inhibitors. Prediction, Synthesis, and Biological Assay of Novel Coumarins. <i>J. Med. Chem.</i> 2006, 49, 1149-1156

Target Species	Human
Chemical Type	Oxadiazolidone (toloxatone analogues)
Mode of Action	Inhibitor

QSAR Model 1	$\text{i-MAO-A} = -1.32\chi_1(\text{C}_{\text{sat}}) - 2.56\chi_2(\text{Het}) + 0.46\alpha_0(\text{Het}) + 1.69\alpha_1(\text{Het}) + 1.16\text{MR}_1 + 1.21$ $+ 7.12\text{MR}_2(\text{C}_{\text{unsat}}) - 1.71\text{MR}_0(\text{Het}) - 2.95 \cdot \log P_0 - 5.6 \cdot \log P_2(\text{C}_{\text{unsat}})$ $\lambda = 0.36 \quad F = 273.93 \quad p < 0.01$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>${}^k\chi(G)$: molecular or group electro-negativities; ${}^k\text{MR}(G)$: refractivities; ${}^k\alpha(G)$: polarizabilities; $\log{}^kP$: logarithms of water/<i>n</i>-octanol partition coefficients; <i>G</i>: atoms included in a specific group; i-MAO-A: MAO-A inhibitory activity score; <i>W</i>: Wilk's λ statistic; <i>F</i>: the Fisher ratio; <i>p</i>: the <i>p</i>-level.</p>
Reference	A QSAR Model for in Silico Screening of MAO-A Inhibitors. Prediction, Synthesis, and Biological Assay of Novel Coumarins. <i>J. Med. Chem.</i> 2006, 49, 1149-1156

Target Species	Human
Chemical Type	Diazoheterocyclic derivatives
Mode of Action	Inhibitor
QSAR Model 1	$\text{i-MAO-A} = -1.32\chi_1(\text{C}_{\text{sat}}) - 2.56\chi_2(\text{Het}) + 0.46\alpha_0(\text{Het}) + 1.69\alpha_1(\text{Het}) + 1.16\text{MR}_1 + 1.21$ $+ 7.12\text{MR}_2(\text{C}_{\text{unsat}}) - 1.71\text{MR}_0(\text{Het}) - 2.95 \cdot \log P_0 - 5.6 \cdot \log P_2(\text{C}_{\text{unsat}})$ $\lambda = 0.36 \quad F = 273.93 \quad p < 0.01$
Molecular Descriptor	<p>Access the following web-servers to compute molecular descriptors: MoDel and e-dragon</p> <p>${}^k\chi(G)$: molecular or group electro-negativities; ${}^k\text{MR}(G)$: refractivities; ${}^k\alpha(G)$: polarizabilities; $\log{}^kP$: logarithms of water/<i>n</i>-octanol partition coefficients; <i>G</i>: atoms included in a specific group; i-MAO-A: MAO-A inhibitory activity score; <i>W</i>: Wilk's λ statistic; <i>F</i>: the Fisher ratio; <i>p</i>: the <i>p</i>-level.</p>
Reference	A QSAR Model for in Silico Screening of MAO-A Inhibitors. Prediction, Synthesis, and Biological Assay of Novel Coumarins. <i>J. Med. Chem.</i> 2006, 49, 1149-1156