

M40 TFA

Cat. No.:	HY-P1025A	
Molecular Formula:	C ₉₅ H ₁₄₆ N ₂₂ O ₂₄ .xC ₂ HF ₃ O ₂	
Sequence:	Gly-Trp-Thr-Leu-Asn-Ser-Ala-Gly-Tyr-Leu-Leu-Gly-Pro-Pro-Pro-Ala-Leu-Ala-Leu-Ala-NH ₂	Gly-Trp-Thr-Leu-Asn-Ser-Ala-Gly-Tyr-Leu-Leu-Gly-Pro-Pro-Pro-Ala-Leu-Ala-Leu-Ala-NH ₂ (TFA salt)
Sequence Shortening:	GWTLNSAGYLLGPPPALALA-NH ₂	
Target:	Neuropeptide Y Receptor	
Pathway:	GPCR/G Protein; Neuronal Signaling	
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	

BIOLOGICAL ACTIVITY

Description	M40 TFA is the TFA salt form of M40. M40 TFA is an antagonist or a weak agonist for galanin receptor depending on different subtypes of galanin receptors in the brain, hypothalamus, hippocampus, amygdala and pancreas ^{[1][2][3]} .																
In Vivo	<p>M40 TFA (0.1-1 nmol, intracisternal injection, single dose) blocks selectively the central cardiovascular responses induced by galanin-(1-15) in Sprague-Dawley rats models, according to the recognition of galanin receptor in N-terminus^[1].</p> <p>M40 TFA (2-8 nmol, intraventricular or intrahippocampal, single dose) exhibits antagonist efficacy against galanin on memory tasks in sprague-dawley rats models, exhibits potency in alleviating the cognitive deficits associated with Alzheimer's disease^[2].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p> <table border="1"> <tr> <td>Animal Model:</td> <td>Vasopressor and tachycardia induced by galanin in Sprague-Dawley rats^[1]</td> </tr> <tr> <td>Dosage:</td> <td>0.1-1 nmol</td> </tr> <tr> <td>Administration:</td> <td>Intracisternal injection, single dose</td> </tr> <tr> <td>Result:</td> <td>Blocked the feeding effects of galanin in the hypothalamus and amygdala. Reduced vasopressor response and heart rate induced by galanin-(1-15), but not those effects induced by galanin-(1-29).</td> </tr> </table> <table border="1"> <tr> <td>Animal Model:</td> <td>Memory impairment induced by galanin in rats model^[2]</td> </tr> <tr> <td>Dosage:</td> <td>2-8 nmol</td> </tr> <tr> <td>Administration:</td> <td>intraventricular or intrahippocampal, single dose</td> </tr> <tr> <td>Result:</td> <td>Blocked the impairment in choice accuracy.</td> </tr> </table>	Animal Model:	Vasopressor and tachycardia induced by galanin in Sprague-Dawley rats ^[1]	Dosage:	0.1-1 nmol	Administration:	Intracisternal injection, single dose	Result:	Blocked the feeding effects of galanin in the hypothalamus and amygdala. Reduced vasopressor response and heart rate induced by galanin-(1-15), but not those effects induced by galanin-(1-29).	Animal Model:	Memory impairment induced by galanin in rats model ^[2]	Dosage:	2-8 nmol	Administration:	intraventricular or intrahippocampal, single dose	Result:	Blocked the impairment in choice accuracy.
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REFERENCES

[1]. Narváez JA, et al., The galanin receptor antagonist M40 blocks the central cardiovascular actions of the galanin N-terminal fragment (1-15). Eur J Pharmacol. 2000 Jul

7;399(2-3):197-203.

[2]. McDonald MP, et al., Galanin inhibits performance on rodent memory tasks. Ann N Y Acad Sci. 1998 Dec 21;863:305-22.

[3]. Branchek T, et al., Molecular biology and pharmacology of galanin receptors. Ann N Y Acad Sci. 1998 Dec 21;863:94-107.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA