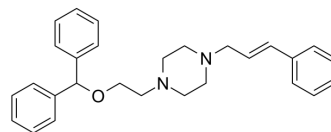


GBR 12783

Cat. No.:	HY-W008610
CAS No.:	67469-57-2
Molecular Formula:	C ₂₈ H ₃₂ N ₂ O
Molecular Weight:	412.57
Target:	Dopamine Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	GBR 12783 is a specific, potent and selective dopamine uptake inhibitor that inhibits the [³ H]dopamine uptake by rat and mice striatal synaptosomes with IC ₅₀ s of 1.8 nM and 1.2 nM, respectively. GBR 12783 can improve memory performance and increase hippocampal acetylcholine release in rats ^{[1][2]} .								
In Vivo	<p>GBR 12783 (10 mg/kg; intraperitoneal injection; for 100 minutes; male Sprague-Dawley rats) treatment reinforces specifically dopamine transmission only at synapses instantaneously active, increases hippocampal ACh release and improves memory performance in a passive avoidance task^[1].</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>Male Sprague-Dawley rats (180-200 g)^[1]</td> </tr> <tr> <td>Dosage:</td> <td>10 mg/kg</td> </tr> <tr> <td>Administration:</td> <td>Intraperitoneal injection; for 100 minutes</td> </tr> <tr> <td>Result:</td> <td>For a moderate electric shock intensity (0.4 mA), improved retention performance, increased hippocampal acetylcholine release in vivo.</td> </tr> </table>	Animal Model:	Male Sprague-Dawley rats (180-200 g) ^[1]	Dosage:	10 mg/kg	Administration:	Intraperitoneal injection; for 100 minutes	Result:	For a moderate electric shock intensity (0.4 mA), improved retention performance, increased hippocampal acetylcholine release in vivo.
Animal Model:	Male Sprague-Dawley rats (180-200 g) ^[1]								
Dosage:	10 mg/kg								
Administration:	Intraperitoneal injection; for 100 minutes								
Result:	For a moderate electric shock intensity (0.4 mA), improved retention performance, increased hippocampal acetylcholine release in vivo.								

REFERENCES

- [1]. Nail-Boucherie K, et al. The specific dopamine uptake inhibitor GBR 12783 improves learning of inhibitory avoidance and increases hippocampal acetylcholine release. *Brain Res Cogn Brain Res*. 1998 Oct;7(2):203-5.
- [2]. Bonnet JJ, et al. GBR 12783, a potent and selective inhibitor of dopamine uptake: biochemical studies in vivo and ex vivo. *Eur J Pharmacol*. 1986 Feb 18;121(2):199-209.

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