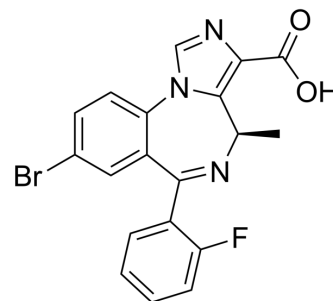


MIDD0301

Cat. No.:	HY-123801	
CAS No.:	2187489-08-1	
Molecular Formula:	C ₁₉ H ₁₃ BrFN ₃ O ₂	
Molecular Weight:	414.23	
Target:	GABA Receptor	
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling	
Storage:	Powder	-20°C 3 years 4°C 2 years
	In solvent	-80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (241.41 mM; ultrasonic and warming and heat to 80°C)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.4141 mL	12.0706 mL	24.1412 mL
	5 mM	0.4828 mL	2.4141 mL	4.8282 mL
	10 mM	0.2414 mL	1.2071 mL	2.4141 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: 2.5 mg/mL (6.04 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: 2.5 mg/mL (6.04 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: 2.5 mg/mL (6.04 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

MIDD0301 (GL-II-93) is an orally effective, anti-asthmatic positive allosteric modulator of GABA_A receptor. MIDD0301 had no significant adverse immune reactions at repeated doses and was better than Prednisone (HY-B0214). MIDD0301 relaxes histamine contractions in guinea pig and human tracheal smooth muscle for the study of bronchial systolic diseases^[1].

REFERENCES

[1]. Yocum GT, et al. A novel GABAA receptor ligand MIDD0301 with limited blood-brain barrier penetration relaxes airway smooth muscle ex vivo and in vivo. Am J Physiol Lung Cell Mol Physiol. 2019 Feb 1;316(2):L385-L390.

[2]. Zahn NM, et al. MIDD0301 - A first-in-class anti-inflammatory asthma drug targets GABAA receptors without causing systemic immune suppression. Basic Clin Pharmacol Toxicol. 2019 Jul;125(1):75-84.

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

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