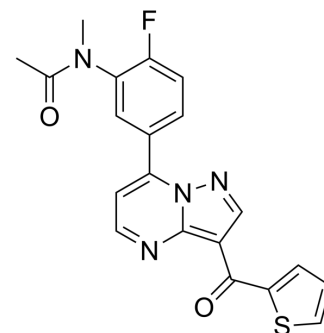


Lorediplon

Cat. No.:	HY-19371		
CAS No.:	917393-39-6		
Molecular Formula:	C ₂₀ H ₁₅ FN ₄ O ₂ S		
Molecular Weight:	394.42		
Target:	GABA Receptor		
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (253.54 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.5354 mL	12.6768 mL	25.3537 mL
	5 mM	0.5071 mL	2.5354 mL	5.0707 mL
	10 mM	0.2535 mL	1.2677 mL	2.5354 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 (6.34 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (6.34 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Lorediplon is a novel non-benzodiazepine drug acting as a GABA_A receptor modulator, differentially active at the alpha1-subunit, associated with promoting sleep. Target: GABA_A. Lorediplon is a drug for the treatment of insomnia, has been successfully completed with a best-in-class efficacy profile in terms of maintaining sleep and sleep quality, Lorediplon targets GABA_A. [1] Lorediplon demonstrates a minimum of 10-fold and 6-fold increase in potency (respectively) in the spontaneous motor activation studies. At concentrations of 1.2mg/kg, Lorediplon demonstrates a 57% increased effect on Slow Wave Sleep (SWS), when compared with a placebo.[2]

REFERENCES

[1]. Zisapel N. Current Phase II investigational therapies for insomnia. *Expert Opin Investig Drugs*. 2015 Mar;24(3):401-411.

[2]. Horoszok L, et al. A single-dose, randomized, double-blind, double dummy, placebo and positive-controlled, five-way cross-over study to assess the pharmacodynamic effects of lorediplon in a phase advance model of insomnia in healthy Caucasian adult male subjects. *Hum Psychopharmacol*. 2014 May;29(3):266-273.

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