**Proteins** 



## **Vafidemstat**

Cat. No.: HY-112623 CAS No.: 1357362-02-7 Molecular Formula:  $C_{19}H_{20}N_4O_2$ Molecular Weight: 336.39

Target: Histone Demethylase; Monoamine Oxidase

Pathway: Epigenetics; Neuronal Signaling Storage: Powder -20°C 3 years In solvent -80°C 6 months

-20°C 1 month

## SOLVENT & SOLUBILITY

In Vitro

DMSO: 50 mg/mL (148.64 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	2.9727 mL	14.8637 mL	29.7274 mL
	5 mM	0.5945 mL	2.9727 mL	5.9455 mL
	10 mM	0.2973 mL	1.4864 mL	2.9727 mL

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

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 5 mg/mL (14.86 mM); Suspended solution; Need ultrasonic
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: 5 mg/mL (14.86 mM); Suspended solution; Need ultrasonic
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 5 mg/mL (14.86 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description	Vafidemstat (ORY-2001) is an oral, brain penetrant, dual lysine-specific histone demethylase (LSD1)/MAO-B inhibitor <sup>[1]</sup> .
IC <sub>50</sub> & Target	$LSD1/MAO-B^{[1]}$
In Vitro	Vafidemstat (ORY-2001), a dual LSD1/MAO-B inhibitor, is a novel epigenetic agent for the treatment of neurodegenerative diseases. LSD1 is a protein that participates in transcription regulation complexes; its modulation can be used to tweak transcriptional imbalances in neurodegenerative disease and redress neuroinflammation and cognitive deficit <sup>[1]</sup> . Vafidemstat (ORY-2001) can be used in the treatment of Alzheimer's disease <sup>[2]</sup> .

	MCE has not independently confirmed the accuracy of these methods. They are for reference only.
REFERENCES	

[1]. ORYZON presents data on the Phase I trial with ORY-2001 at the 13th International Conference on Alzheimer's and Parkinson's diseases

[2]. ORYZON Reports Financial Results and Corporate Update for the 1st Half Ended June 30, 2018.

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

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Page 2 of 2 www.MedChemExpress.com