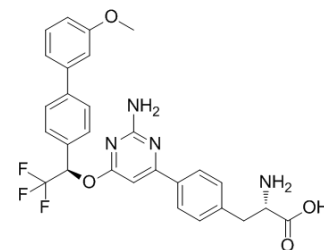


## LX-1031

<b>Cat. No.:</b>	HY-13041		
<b>CAS No.:</b>	945976-76-1		
<b>Molecular Formula:</b>	C <sub>28</sub> H <sub>25</sub> F <sub>3</sub> N <sub>4</sub> O <sub>4</sub>		
<b>Molecular Weight:</b>	538.52		
<b>Target:</b>	Tryptophan Hydroxylase		
<b>Pathway:</b>	Metabolic Enzyme/Protease		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : ≥ 34 mg/mL (63.14 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		1.8569 mL	9.2847 mL	18.5694 mL
	5 mM		0.3714 mL	1.8569 mL	3.7139 mL
	10 mM		0.1857 mL	0.9285 mL	1.8569 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 (4.64 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: ≥ 2.5 mg/mL (4.64 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.5 mg/mL (4.64 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

LX-1031 is a potent, orally available tryptophan 5-hydroxylase (TPH) inhibitor that reduces serotonin (5-HT) synthesis peripherally.

#### In Vivo

With oral administration of LX-1031 in mice, the average 5-HT reductions in the jejunum relative to control are appr 33, 51, and 66% with the 15, 45 and 135 mg/kg/day doses respectively. In a preliminary report, the effects of LX-1031, 100 mg/kg daily, on 5-HT levels in jejunal mucosa are reversible within 2 days of discontinuation in mice<sup>[1]</sup>. LX-1031 dose-dependently

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reduces expression of 5-HT in the duodenum, jejunum and ileum, but has no effect on brain 5-HT levels in preclinical assay [2].

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

## CUSTOMER VALIDATION

- Cell Rep. 2019 Jul 16;28(3):792-803.e4.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

[1]. Camilleri M. LX-1031, a tryptophan 5-hydroxylase inhibitor, and its potential in chronic diarrhea associated with increased serotonin. *Neurogastroenterol Motil.* 2011 Mar;23(3):193-200.

[2]. Camilleri M. LX-1031, a tryptophan 5-hydroxylase inhibitor that reduces 5-HT levels for the potential treatment of irritable bowel syndrome. *IDrugs.* 2010 Dec;13(12):921-8.

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

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