**LX-1031**

Cat. No.: HY-13041  
CAS No.: 945976-76-1  
Molecular Formula: $\text{C}_{28}\text{H}_{25}\text{F}_{3}\text{N}_{4}\text{O}_{4}$  
Molecular Weight: 538.52  
Target: Tryptophan Hydroxylase  
Pathway: Metabolic Enzyme/Protease  
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: $\geq 34\,\text{mg/mL}$ (63.14 mM)  
*“$\geq$” means soluble, but saturation unknown.*

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td>1.8569 mL</td>
<td>9.2847 mL</td>
<td>18.5694 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td>0.3714 mL</td>
<td>1.8569 mL</td>
<td>3.7139 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td>0.1857 mL</td>
<td>0.9285 mL</td>
<td>1.8569 mL</td>
</tr>
</tbody>
</table>

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

**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\[^1\]. LX-1031 dose-dependently reduces expression of 5-HT in the duodenum, jejunum and ileum, but has no effect on brain 5-HT levels in preclinical assay\[^2\].

**REFERENCES**

[1]. Camilleri M. LX-1031, a tryptophan 5-hydroxylase inhibitor, and its potential in chronic diarrhea associated with increased serotonin. Neurogastroenterol

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