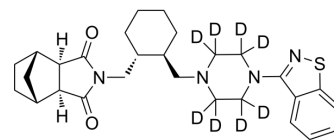


## Lurasidone-d<sub>8</sub>

Cat. No.:	HY-B0032AS
CAS No.:	1132654-54-6
Molecular Formula:	C <sub>28</sub> H <sub>28</sub> D <sub>8</sub> N <sub>4</sub> O <sub>2</sub> S
Molecular Weight:	500.73
Target:	Dopamine Receptor; 5-HT Receptor
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Lurasidone-d <sub>8</sub> is deuterium labeled Lurasidone. Lurasidone (SM-13496) is an antagonist of both dopamine D2 and 5-HT7 with IC50s of 1.68 and 0.495 nM, respectively. Lurasidone (SM-13496) is also a partial agonist of 5-HT1A receptor with an IC50 of 6.75 nM.
<b>In Vitro</b>	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Ishibashi T, et al. Pharmacological profile of lurasidone, a novel antipsychotic agent with potent 5-hydroxytryptamine 7 (5-HT7) and 5-HT1A receptor activity. *J Pharmacol Exp Ther.* 2010 Jul;334(1):171-81.
- [3]. Sakine Atila Karaca, et al. Development of a validated high-performance liquid chromatographic method for the determination of Lurasidone in pharmaceuticals. *Marmara Pharm J.* 2017;21 (4): 931-937.

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

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