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Lieferung & Zahlungsart

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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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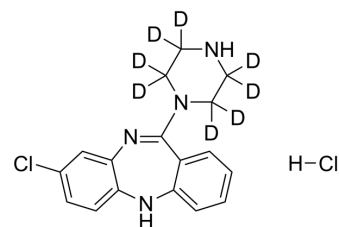
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N-Desmethylclozapine-d₈ hydrochloride

Cat. No.:	HY-G0021S1		
CAS No.:	2705402-91-9		
Molecular Formula:	C ₁₇ H ₁₀ D ₈ Cl ₂ N ₄		
Molecular Weight:	357.31		
Target:	mAChR; Opioid Receptor; Drug Metabolite; Virus Protease		
Pathway:	GPCR/G Protein; Neuronal Signaling; Metabolic Enzyme/Protease; Anti-infection		
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 : ≥ 50 mg/mL (139.93 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	2.7987 mL	13.9935 mL	27.9869 mL
	5 mM	0.5597 mL	2.7987 mL	5.5974 mL
	10 mM	0.2799 mL	1.3993 mL	2.7987 mL

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

BIOLOGICAL ACTIVITY

Description

N-Desmethylclozapine-d₈ (hydrochloride) is the deuterium labeled N-Desmethylclozapine hydrochloride. N-Desmethylclozapine hydrochloride is a major active metabolite of the atypical antipsychotic agent Clozapine. N-Desmethylclozapine hydrochloride is a potent, allosteric and partial M1 receptors agonist (EC₅₀=115 nM) and is able to potentiate hippocampal N-methyl-d-aspartate (NMDA) receptor currents through M1 receptor activation. N-Desmethylclozapine hydrochloride is also a δ-opioid agonist^{[1][2][3]}.

In Vitro

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^[1].

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]. Li Z, et al. N-desmethylozapine, a major metabolite of clozapine, increases cortical acetylcholine and dopamine release in vivo via stimulation of M1 muscarinic receptors. *Neuropsychopharmacology.* 2005 Nov;30(11):1986-95.

[3]. Odagaki Y, et al. Comparative analysis of pharmacological properties of xanomeline and N-desmethylozapine in rat brain membranes. *J Psychopharmacol.* 2016 Sep;30(9):896-912.

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

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