## **Product** Data Sheet

## Melitracen-d<sub>6</sub> hydrochloride

Cat. No.: HY-108256S CAS No.: 1189648-08-5 Molecular Formula:  $C_{21}H_{20}D_6CIN$ 

Molecular Weight: 333.93

Target: 5-HT Receptor; Isotope-Labeled Compounds Pathway: GPCR/G Protein; Neuronal Signaling; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Melitracen-d <sub>6</sub> (hydrochloride) is the deuterium labeled Melitracen hydrochloride. Melitracen hydrochloride is an orally active biphasic antidepressant and antianxiety agent. Melitracen hydrochloride can inhibit the uptake of Norepinephrine and 5-HT (serotonin) through the presynaptic membrane inducing the increase of monoamine transmitters in synaptic space[1][2].
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 <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]. Xiaoqian Zhou, et al. The Efficacy of Flupentixol-Melitracen in the Adjuvant Therapy of Ulcerative Colitis in the Chinese Population: A Meta-Analysis. Gastroenterol Res Pract. 2019 Feb 28;2019:3480732.

[3]. K Shimamoto, et al. Myriatic Effect of 9-(gamma-dimethylamino-propylidene)-10, 10-diemthyl-9, 10-dihydroanthracene Hydrochloride (Melitracen) in Mice and Rats. Acta Sch Med Univ Kioto. 1967 Jul;40(1):38-47.

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

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