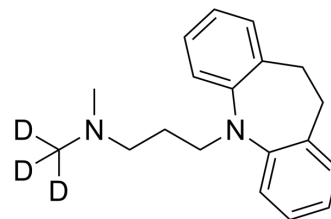


Imipramine-d₃ hydrochloride

Cat. No.:	HY-B1490S1
CAS No.:	112898-42-7
Molecular Formula:	C ₁₉ H ₂₂ D ₃ ClN ₂
Molecular Weight:	319.89
Target:	Serotonin Transporter; Autophagy; Apoptosis; Isotope-Labeled Compounds
Pathway:	Neuronal Signaling; Autophagy; Apoptosis; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



HCl

BIOLOGICAL ACTIVITY

Description	Imipramine-d ₃ (hydrochloride) is deuterium labeled Imipramine (hydrochloride). Imipramine is an orally active tertiary amine tricyclic antidepressant. Imipramine is a Fascin1 inhibitor with antitumor activities. Imipramine also inhibits serotonin transporter with an IC ₅₀ value of 32 nM. Imipramine stimulates U-87MG glioma cells autophagy and induces HL-60 cell apoptosis. Imipramine shows neuroprotective and immunomodulatory effects[1][2][3][4][5][6].
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

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

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