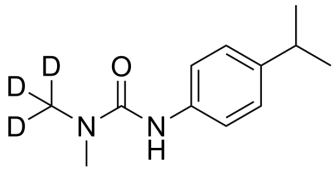
Isoproturon-d3

Cat. No.:	HY-B1859S1
CAS No.:	352438-80-3
Molecular Formula:	$C_{12}H_{15}D_3N_2O$
Molecular Weight:	209.3
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Isoproturon-d_3 is the deuterium labeled Isoproturon[1]. Isoproturon belongs to the phenylurea herbicide family and is a systemic and selective herbicide. Isoproturon is widely applied for killing weeds in farmland, which can be used in the control of annual grasses and broad-leaved weeds in spring and winter wheat, winter rye and spring and winter barley[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 Feb;53(2):211-216.

[2]. Feng Fan Lu, et al. Isoproturon-Induced Salicylic Acid Confers Arabidopsis Resistance to Isoproturon Phytotoxicity and Degradation in Plants. J Agric Food Chem. 2018 Dec 19;66(50):13073-13083.

[3]. Mian Muhammad, et al. Determination of Isoproturon in Environmental Samples Using the QuEChERS Extraction-Spectrofluorimetric Method. Environ Toxicol Chem. 2019 Dec38(12):2614-2620.

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

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