Product Data Sheet

Metolachlor-d₆

Cat. No.: HY-B1871S **CAS No.:** 1219803-97-0

Molecular Formula: $C_{15}H_{16}D_{6}CINO_{2}$

Molecular Weight: 289.83

Target: Isotope-Labeled Compounds

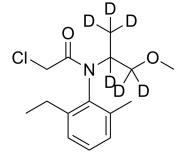
Pathway: Others

Storage: Pure form -20°C 3 years

4°C 2 years

In solvent -80°C 6 months

-20°C 1 month



BIOLOGICAL ACTIVITY

Description	Metolachlor- d_6 is the deuterium labeled Metolachlor[1]. Metolachlor is a pre-emergent selective, chloroacetanilide herbicide for the control of a variety of annual grass and broad leaf weeds in corn and other crops. Metolachlor is a chiral herbicide consisting of four stereoisomers[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]. Jingqian Xie, et al. Metolachlor Stereoisomers: Enantioseparation, Identification and Chiral Stability. J Chromatogr A. 2016 Sep 9;1463:42-8.

[3]. D M Stamper, et al. Biodegradation of the Acetanilide Herbicides Alachlor, Metolachlor, and Propachlor. Crit Rev Microbiol. 199824(1):1-22.

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

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Inhibitors