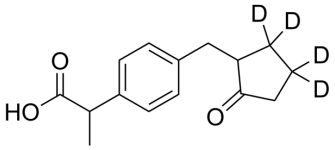
Loxoprofen-d_4

Cat. No.:	HY-B0578S
Molecular Formula:	$C_{15}H_{14}D_4O_3$
Molecular Weight:	250.33
Target:	COX; Isotope-Labeled Compounds
Pathway:	Immunology/Inflammation; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Loxoprofen-d_4 is deuterium labeled Loxoprofen. Loxoprofen is a non-steroidal anti-inflammatory agent with analgesic and anti-pyretic properties. Loxoprofen sodium is a nonselective COX inhibitor with IC50s of 6.5 and 13.5 μM for COX-1 and COX-2, respectively[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[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]. Paudel S, et al. Assessing Drug Interaction and Pharmacokinetics of Loxoprofen in Mice Treated with CYP3A Modulators. Pharmaceutics. 2019;11(9):479. Published 2019 Sep 16.

[3]. Riendeau D, et al. Evaluation of loxoprofen and its alcohol metabolites for potency and selectivity of inhibition of cyclooxygenase-2. Bioorg Med Chem Lett. 2004;14(5):1201-1203.

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