

Product Data Sheet

Ketoprofen-¹³C,d₃

 Cat. No.:
 HY-B0227S2

 CAS No.:
 1189508-77-7

Molecular Formula: $C_{15}^{13}CH_{11}D_3O_3$

Molecular Weight:

Target: Apoptosis; COX; Isotope-Labeled Compounds
Pathway: Apoptosis; Immunology/Inflammation; Others

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

Analysis.

258.29

BIOLOGICAL ACTIVITY

Description	Ketoprofen- 13 C, d ₃ is the 13 C- and deuterium labeled Ketoprofen. Ketoprofen (RP-19583) is a non-steroidal antiinflammatory agent, acting as a potent inhibitor of COX, with IC50s of 2 nM and 26 nM for COX-1 and COX-2 in human blood monocytes, respectively[1].
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][2]} . 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):211-223.

[2]. Palomer A, et al. Structure-based design of cyclooxygenase-2 selectivity into ketoprofen. Bioorg Med Chem Lett. 2002 Feb 25;12(4):533-7.

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

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