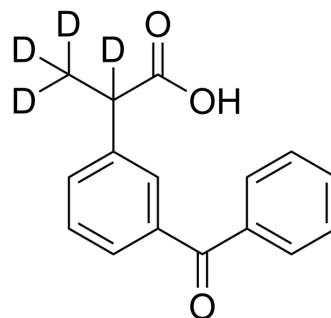


Ketoprofen-d₄

Cat. No.:	HY-B0227S1		
CAS No.:	1219805-29-4		
Molecular Formula:	C ₁₆ H ₁₀ D ₄ O ₃		
Molecular Weight:	258.31		
Target:	Apoptosis; COX		
Pathway:	Apoptosis; Immunology/Inflammation		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Ketoprofen-d ₄ is the deuterium labeled Ketoprofen. Ketoprofen (RP-19583) is a non-steroidal antiinflammatory agent, acting as a potent inhibitor of COX, with IC ₅₀ s 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] . 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]. 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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