Molecular Weight:

## **Product** Data Sheet

## 2-Hydroxy Ibuprofen-d<sub>6</sub>

 Cat. No.:
 HY-126121S

 CAS No.:
 1217055-71-4

 Molecular Formula:
  $C_{13}H_{12}D_6O_3$ 

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

228.32

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	2-Hydroxy Ibuprofen- $d_6$ is the deuterium labeled 2-Hydroxy Ibuprofen. 2-Hydroxy Ibuprofen is a metabolite of Ibuprofen. Ibuprofen is an anti-inflammatory inhibitor targeting COX-1 and COX-2 with IC50s of 13 $\mu$ M and 370 $\mu$ M, 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 <sup>[1]</sup> .  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]. Noreen Y, et al. Development of a radiochemical cyclooxygenase-1 and -2 in vitro assay for identification of natural products as inhibitors of prostaglandin biosynthesis. J Nat Prod. 1998 Jan;61(1):2-7.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA