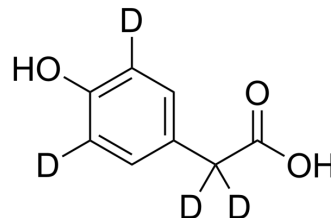


4-Hydroxyphenylacetic acid-d₄

Cat. No.:	HY-N1902S1
Molecular Formula:	C ₈ H ₄ D ₄ O ₃
Molecular Weight:	156.17
Target:	Keap1-Nrf2; Endogenous Metabolite
Pathway:	NF-κB; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	4-Hydroxyphenylacetic acid-d ₄ is the deuterium labeled 4-Hydroxyphenylacetic acid[1]. 4-hydroxyphenylacetic acid, a major microbiota-derived metabolite of polyphenols, is involved in the antioxidative action. 4-hydroxyphenylacetic acid induces expression of Nrf2[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 Feb;53(2):211-216.
- [2]. Zhao H, et al. 4-Hydroxyphenylacetic Acid Prevents Acute APAP-Induced Liver Injury by Increasing Phase II and Antioxidant Enzymes in Mice. *Front Pharmacol*. 2018 Jun 19;9:653.

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