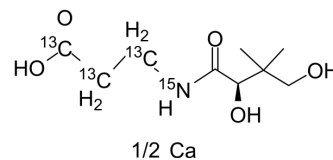


Pantothenic acid-¹³C₃,¹⁵N hemicalcium

Cat. No.:	HY-B0430S
CAS No.:	356786-94-2
Molecular Formula:	C ₉ H ₁₇ NO ₅ ·1/2Ca
Molecular Weight:	243.24
Target:	Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Pantothenic acid- ¹³ C ₃ , ¹⁵ N (hemicalcium) is the ¹³ C-labeled and ¹⁵ N-labeled D-Pantothenic acid. D-Pantothenic acid is an essential trace nutrient that functions as the obligate precursor of coenzyme A (CoA). D-Pantothenic acid plays key roles in myriad biological processes, including many that regulate carbohydrate, lipid, protein, and nucleic acid metabolism[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]. M Sato, et al. Pantothenic acid decreases valproic acid-induced neural tube defects in mice (I). *Teratology.* 1995 Sep;52(3):143-8.
- [3]. Shuai Chen, et al. Metabolomic analysis of the toxic effect of chronic exposure of cadmium on rat urine. *Environ Sci Pollut Res Int.* 2018 Feb;25(4):3765-3774.

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