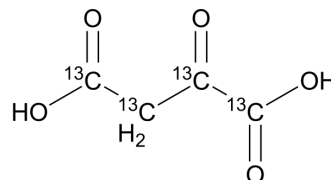


Oxaloacetic acid-¹³C₄

Cat. No.:	HY-W010382S
CAS No.:	161096-82-8
Molecular Formula:	¹³ C ₄ H ₄ O ₅
Molecular Weight:	136.04
Target:	Endogenous Metabolite; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



BIOLOGICAL ACTIVITY

Description	Oxaloacetic acid- ¹³ C ₄ is the ¹³ C-labeled Oxaloacetic acid. Oxaloacetic acid (2-Oxosuccinic acid) is a metabolic intermediate involved in several ways, such as citric acid cycle, gluconeogenesis, the urea cycle, the glyoxylate cycle, amino acid synthesis, and fatty acid synthesis[1][2][3].
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 ^[3] MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [1]. F. L. Breusch. The fate of oxaloacetic acid in different organs. *Biochem J.* 1939 Nov; 33(11): 1757-1770.
- [2]. Brian D Fink, et al. Oxaloacetic acid mediates ADP-dependent inhibition of mitochondrial complex II-driven respiration. *J Biol Chem.* 2018 Dec 21;293(51):19932-19941.
- [3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

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

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