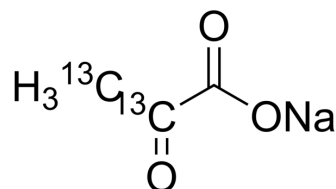


2-Oxopropanoate-¹³C₅ sodium

Cat. No.:	HY-W015913S4
CAS No.:	89196-78-1
Molecular Formula:	C ¹³ C ₂ H ₃ NaO ₃
Molecular Weight:	112.03
Target:	Endogenous Metabolite; Reactive Oxygen Species
Pathway:	Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	2-Oxopropanoate- ¹³ C ₅ (sodium) is the ¹³ C labeled Sodium 2-oxopropanoate[1]. Sodium 2-oxopropanoate (Sodium pyruvate), a three-carbon metabolite of Glucose, is a compound produced in the glycolytic pathway. Sodium 2-oxopropanoate is a free radical scavenger that can scavenge ROS[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 ^[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]. S Nemoto, et al. Role for mitochondrial oxidants as regulators of cellular metabolism. *Mol Cell Biol.* 2000 Oct;20(19):7311-8.
- [3]. W Zhao, et al. Fructose induced deactivation of antioxidant enzymes: preventive effect of pyruvate. *Free Radic Res.* 2000 Jul33(1):23-30.

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

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