
Product Data Sheet

Product Name: Sodium 2-oxopropanoate-13C

Cat. No.: GC72573

Chemical Properties

Cas. No. 124052-04-6

Formula $C_2^{13}CH_3NaO_3$ M.Wt 111.04

Solubility Storage Store at RT

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure **Background**

Sodium 2-oxopropanoate-13C is the 13C 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].

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].

<p >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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