
Product Data Sheet

Product Name: Pyruvic acid 13C sodium

Cat. No.: GC68052

Chemical Properties

Cas. No. 87976-70-3

Formula $C_2^{13}CH_3NaO_3$

M.Wt 111.04

Solubility H_2O : 100 mg/mL (900.58 mM; Need ultrasonic); DMSO : \geq
50 mg/mL (450.29 mM)Store
Storage at -
20°C

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**

Pyruvic acid 13C (Acetylformic acid 13C) sodium is the 13C-labeled Pyruvic acid. Pyruvic acid is an intermediate metabolite in the metabolism of carbohydrates, proteins, and fats.

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].

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.

[2]. K?adna A, et al. Reactivity of pyruvic acid and its derivatives towards reactive oxygen species. *Luminescence.* 2015 Nov;30(7):1153-8.

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

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