## **Product** Data Sheet

## Pyruvic acid-<sup>13</sup>C

Cat. No.: HY-Y0781S1 CAS No.: 99124-30-8 Molecular Formula:  $C_2^{13}CH_4O_3$ 

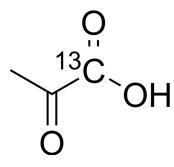
Molecular Weight: 89.05

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.



## **BIOLOGICAL ACTIVITY**

Description	Pyruvic acid $^{-13}$ C is the $^{13}$ C labeled Pyruvic acid $^{[1]}$ . Pyruvic acid is an intermediate metabolite in the metabolism of carbohydrates, proteins, and fats $^{[2]}$ .
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 <sup>[1]</sup> .  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]. Kładna 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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