## **Product** Data Sheet

## Fumaric acid-13C4

 Cat. No.:
 HY-W015883S

 CAS No.:
 201595-62-2

 Molecular Formula:
 13C4H4O4

Molecular Weight: 120.04

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

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

Analysis.

## **BIOLOGICAL ACTIVITY**

Description	Fumaric acid-13C4 is the 13C-labeled Fumaric acid. Fumaric acid, associated with fumarase deficiency, is identified as an oncometabolite or an endogenous, cancer causing metabolite.
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;53(2):211-216.

[2]. Whelan DT, et al. Fumaric aciduria: a new organic aciduria, associated with mental retardation and speech impairment. Clin Chim Acta. 1983 Aug 31;132(3):301-8.

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

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