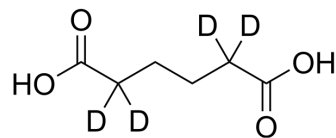


Adipic acid-d₄-1

Cat. No.:	HY-W017522S5
CAS No.:	19031-55-1
Molecular Formula:	C ₆ H ₆ D ₄ O ₄
Molecular Weight:	150.17
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Adipic acid-d ₄ -1 is the deuterium labeled Adipic acid[1]. Adipic acid is found to be associated with HMG-CoA lyase deficiency, carnitine-acylcarnitine translocase deficiency, malonyl-Coa decarboxylase deficiency, and medium Chain acyl-CoA dehydrogenase deficiency, which are inborn errors of metabolism[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 ^[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]. G.Frauentrost-Egger, Friedrich K. Trefz (2017). MetaGene: Metabolic & Genetic Information Center. METAGENE consortium.

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

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