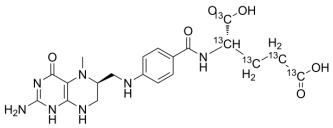
Levomefolic acid-$^{13}C_5$

Cat. No.:	HY-14781S2
CAS No.:	2687960-08-1
Molecular Formula:	$C_{15}{}^{13}C_5H_{25}N_7O_6$
Molecular Weight:	464.42
Target:	DNA/RNA Synthesis; Endogenous Metabolite; Reactive Oxygen Species
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Levomefolic acid-$^{13}C_5$ is the ^{13}C labeled Levomefolic acid[1]. Levomefolic acid (5-MTHF) is an orally active, brain-penetrant natural active form of folic acid and is one of the most widely used folic acid food supplements[2][3].
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]. Manisha Prajapat, et al. Virtual screening and molecular dynamics study of approved drugs as inhibitors of spike protein S1 domain and ACE2 interaction in SARS-CoV-2. J Mol Graph Model. 2020 Dec;101:107716.

[3]. Maša Vidmar Golja, et al. Simultaneous quantification of intracellular concentrations of clinically important metabolites of folate-homocysteine cycle by LC-MS/MS. Anal Biochem. 2020 Sep 15;605:113830.

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