Product Data Sheet

5-Methyluridine-d4

Cat. No.: HY-W009444S

CAS No.: 82845-85-0 Molecular Formula: $C_{10}H_{10}D_4N_2O_6$

Molecular Weight: 262.25

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

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

Analysis.

BIOLOGICAL ACTIVITY

Description	5-Methyluridine-d ₄ is the deuterium labeled 5-Methyluridine[1]. 5-Methyluridine is a is an endogenous methylated nucleoside found in human fluids[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]. Yang TH, et al. Intracellular levels of S-adenosylhomocysteine but not homocysteine are highly correlated to the expression of nm23-H1 and the level of 5-methyldeoxycytidine in human hepatoma cells with different invasion activities. Nutr Cancer. 2006;55(2):224-31.

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

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