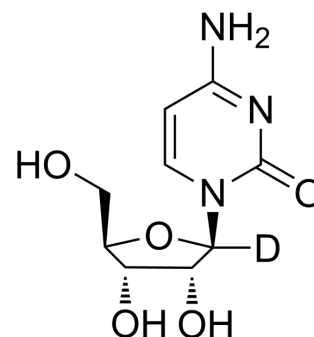


Cytidine-d1

Cat. No.:	HY-B0158S4
CAS No.:	177978-30-2
Molecular Formula:	C ₉ H ₁₂ DN ₃ O ₅
Molecular Weight:	244.22
Target:	Endogenous Metabolite; Nucleoside Antimetabolite/Analog; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Cell Cycle/DNA Damage; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Cytidine-d1 is the deuterium labeled Cytidine. Cytidine is a pyrimidine nucleoside and acts as a component of RNA. Cytidine is a precursor of uridine. Cytidine controls neuronal-glial glutamate cycling, affecting cerebral phospholipid metabolism, catechol
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]. Jonas DA, et al. Safety considerations of DNA in food. *Ann Nutr Metab*. 2001;45(6):235-54.; Wurtman RJ, et al. Effect of oral CDP-choline on plasma choline and uridine levels in humans. *Biochem Pharmacol*. 2000 Oct 1;60(7):989-92.; Machado-Vieira R, et al. N

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

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