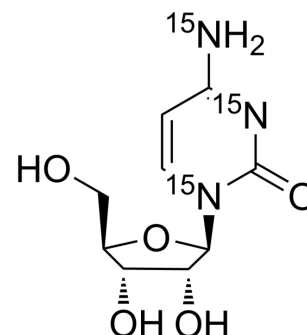


Cytidine-15N3

Cat. No.:	HY-B0158S6
Molecular Formula:	C ₉ H ₁₃ ¹⁵ N ₃ O ₅
Molecular Weight:	246.2
Target:	Nucleoside Antimetabolite/Analog; Endogenous Metabolite
Pathway:	Cell Cycle/DNA Damage; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Cytidine- ¹⁵ N ₃ is the ¹⁵ N labeled Cytidine[1]. Cytidine is a pyrimidine nucleoside and acts as a component of RNA. Cytidine is a precursor of uridine. Cytidine controls neuronal-glia glutamate cycling, affecting cerebral phospholipid metabolism, catecholamine synthesis, and mitochondrial function[2][3][4].
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.
- [3]. Wurtman RJ, et al. Effect of oral CDP-choline on plasma choline and uridine levels in humans. *Biochem Pharmacol.* 2000 Oct 160(7):989-92.
- [4]. Machado-Vieira R, et al. New therapeutic targets for mood disorders. *ScientificWorldJournal.* 2010 Apr 1310:713-26.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA