Product Data Sheet

5-Fluoro-5'-deoxycytidine-d₃

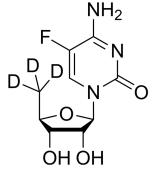
Molecular Weight: 248.23

Target: Nucleoside Antimetabolite/Analog; Isotope-Labeled Compounds

Pathway: Cell Cycle/DNA Damage; Others

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

Analysis.



BIOLOGICAL ACTIVITY

Description	5-Fluoro-5'-deoxycytidine-d ₃ is deuterated labeled 5-Fluoro-5'-deoxycytidine (HY-W009538). 5-Fluoro-5'-deoxycytidine is a cytidine analog. Cytidine analogs have a mechanism of inhibiting DNA methyltransferases (such as Zebularine, HY-13420), and have potential anti-metabolic and anti-tumor activities ^[1] .
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]. Gowher H, et al. Mechanism of inhibition of DNA methyltransferases by cytidine analogs in cancer therapy. Cancer Biol Ther. 2004 Nov;3(11):1062-8.

[2]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019 Feb;53(2):211-216.

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