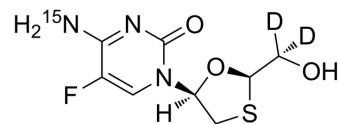


Emtricitabine-¹⁵N,₂

Cat. No.:	HY-17427S
CAS No.:	2714436-53-8
Molecular Formula:	C ₈ H ₈ D ₂ FN ₂ ¹⁵ NO ₃ S
Molecular Weight:	250.25
Target:	HIV; Reverse Transcriptase; Endogenous Metabolite
Pathway:	Anti-infection; Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Emtricitabine- ¹⁵ N, ₂ is a ¹⁵ N-labeled and deuterium labeled Emtricitabine. Emtricitabine is a nucleoside reverse transcriptase inhibitor (NRTI) with an EC50 of 0.01 μM in PBMC cell. It is an antiviral agent for the treatment of HIV infection.
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;53(2):211-216.
- [2]. Saag MS, et al. Emtricitabine, a new antiretroviral agent with activity against HIV and hepatitis B virus. *Clin Infect Dis.* 2006 Jan 1;42(1):126-31.; Szczech GM, Wang LH, Walsh JP, Reproductive toxicology profile of emtricitabine in mice and rabbits. *Reprod Toxicol.* 2003 Jan-Feb;17(1):95-108.; Faltz M, et al. Effect of the Anti-retroviral Drugs Efavirenz, Tenofovir and Emtricitabine on Endothelial Cell Function: Role of PARP. *Cardiovasc Toxicol.* 2017 Jan 3. [Epub ahead of print]; Xu P, et al. Combined Medication of Antiretroviral Drugs Tenofovir Disoproxil Fumarate, Emtricitabine, and Raltegravir Reduces Neural Progenitor Cell Proliferation In Vivo and In Vitro. *J Neuroimmune Pharmacol.* 2017 Dec;12(4):682-692.

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