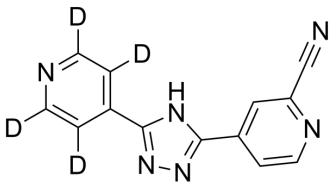
Topiroxostat-d_4

Cat. No.:	HY-14874S
CAS No.:	2732868-49-2
Molecular Formula:	$C_{13}H_4D_4N_6$
Molecular Weight:	252.27
Target:	Xanthine Oxidase; Cytochrome P450; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Topiroxostat-d_4 is deuterium labeled Topiroxostat. Topiroxostat (FYX-051) is a potent and orally active xanthine oxidoreductase (XOR) inhibitor with an IC50 value of 5.3 nM and a Ki value of 5.7 nM. Topiroxostat exhibits weak CYP3A4-inhibitory activity (18.6%). Topiroxostat has the potential for hyperuricemia treatment[1][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;53(2):211-216.

[2]. Matsumoto K, et al. FYX-051: a novel and potent hybrid-type inhibitor of xanthine oxidoreductase. J Pharmacol Exp Ther. 2011 Jan;336(1):95-103.

[3]. Sato T, et al. Discovery of 3-(2-cyano-4-pyridyl)-5-(4-pyridyl)-1,2,4-triazole, FYX-051 - a xanthine oxidoreductase inhibitor for the treatment of hyperuricemia [corrected]. Bioorg Med Chem Lett. 2009 Nov 1;19(21):6225-9.

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