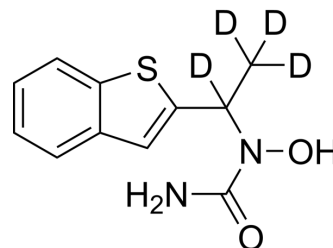


Zileuton-d₄

Cat. No.:	HY-14164S
CAS No.:	1189878-76-9
Molecular Formula:	C ₁₁ H ₈ D ₄ N ₂ O ₂ S
Molecular Weight:	240.31
Target:	Lipoxygenase; Ferroptosis; Isotope-Labeled Compounds
Pathway:	Metabolic Enzyme/Protease; Apoptosis; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Zileuton-d ₄ is the deuterium labeled Zileuton. Zileuton (A 64077) is a potent and selective inhibitor of 5-lipoxygenase with antiasthmatic properties[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]. Abueid L, et al. Inhibition of 5-lipoxygenase by zileuton in a rat model of myocardial infarction. *Anatol J Cardiol*. 2016 Nov 10
- [3]. Kuvibidila S, et al. Hydroxyurea and Zileuton Differentially Modulate Cell Proliferation and Interleukin-2 Secretion by Murine Spleen Cells: Possible Implication on the Immune Function and Risk of Pain Crisis in Patients with Sickle Cell Disease. *Ochsner*
- [4]. Gounaris E, et al. Zileuton, 5-lipoxygenase inhibitor, acts as a chemopreventive agent in intestinal polyposis, by modulating polyp and systemic inflammation. *PLoS One*. 2015 Mar 6;10(3):e0121402

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