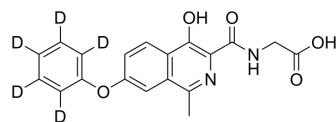


Roxadustat-d₅

Cat. No.:	HY-13426S
CAS No.:	2043026-13-5
Molecular Formula:	C ₁₉ H ₁₁ D ₅ N ₂ O ₅
Molecular Weight:	357.37
Target:	HIF/HIF Prolyl-Hydroxylase; Ferroptosis
Pathway:	Metabolic Enzyme/Protease; Apoptosis
Storage:	-20°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



BIOLOGICAL ACTIVITY

Description	Roxadustat-d ₅ is deuterium labeled Roxadustat. Roxadustat is an oral hypoxia-inducible factor prolyl-hydroxylase inhibitor (HIF-PHI) that promotes erythropoiesis through increasing endogenous erythropoietin, improving iron regulation, and reducing hepcidin[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]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Provenzano R, et al. Roxadustat (FG-4592) Versus Epoetin Alfa for Anemia in Patients Receiving Maintenance Hemodialysis: A Phase 2, Randomized, 6- to 19-Week, Open-Label, Active-Comparator, Dose-Ranging, Safety and Exploratory Efficacy Study. *Am J Kidney Dis.* 2016 Jun;67(6):912-24.
- [3]. Wu K, et al. Stabilization of HIF-1 α by FG-4592 promotes functional recovery and neural protection in experimental spinal cord injury. *Brain Res.* 2016 Feb 1;1632:19-26.

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

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