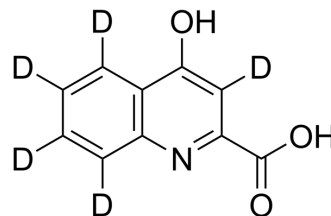


Kynurenic acid-d₅

Cat. No.:	HY-100806S		
CAS No.:	350820-13-2		
Molecular Formula:	C ₁₀ H ₂ D ₅ NO ₃		
Molecular Weight:	194.2		
Target:	Apoptosis; iGluR; Endogenous Metabolite; CXCR; GPR35; Isotope-Labeled Compounds		
Pathway:	Apoptosis; Membrane Transporter/Ion Channel; Neuronal Signaling; Metabolic Enzyme/Protease; GPCR/G Protein; Immunology/Inflammation; Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Kynurenic acid-d ₅ is the deuterium labeled Kynurenic acid. Kynurenic acid, an endogenous tryptophan metabolite, is a broad-spectrum antagonist targeting NMDA, glutamate, α7 nicotinic acetylcholine receptor. Kynurenic acid is also an agonist of GPR35/CXCR8[1][2].
IC₅₀ & Target	NMDA Receptor
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]. Wang J, et al. Kynurenic acid as a ligand for orphan G protein-coupled receptor GPR35. *J Biol Chem.* 2006 Aug 4;281(31):22021-8.
- [3]. Albuquerque EX, et al. Kynurenic acid as an antagonist of α7 nicotinic acetylcholine receptors in the brain: facts and challenges. *Biochem Pharmacol.* 2013 Apr 15;85(8):1027-32.
- [4]. Malaczewska J, et al. Effect of oral administration of kynurenic acid on the activity of the peripheral blood leukocytes in mice. *Cent Eur J Immunol.* 2014;39(1):6-13.

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

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