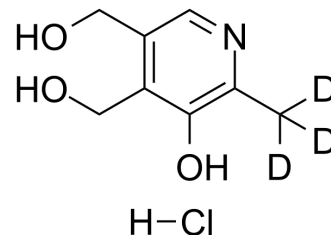


Pyridoxine-d₃ hydrochloride

Cat. No.:	HY-N0682S
CAS No.:	1189921-12-7
Molecular Formula:	C ₈ H ₉ D ₃ ClNO ₃
Molecular Weight:	208.66
Target:	Keap1-Nrf2; Endogenous Metabolite
Pathway:	NF-κB; Metabolic Enzyme/Protease
Storage:	-20°C, sealed storage, away from moisture

* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H₂O : ≥ 50 mg/mL (239.62 mM)
 DMSO : ≥ 50 mg/mL (239.62 mM)
 H₂O : ≥ 50 mg/mL (239.62 mM)
 DMSO : ≥ 50 mg/mL (239.62 mM)
 * "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent		1 mg	5 mg	10 mg
	Concentration	Mass			
	1 mM		4.7925 mL	23.9624 mL	47.9249 mL
	5 mM		0.9585 mL	4.7925 mL	9.5850 mL
	10 mM		0.4792 mL	2.3962 mL	4.7925 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Pyridoxine-d₃ (hydrochloride) is the deuterium labeled Pyridoxine hydrochloride. Pyridoxine hydrochloride (Pyridoxol; Vitamin B6) is a pyridine derivative. Pyridoxine (Pyridoxol; Vitamin B6) exerts antioxidant effects in cell model of Alzheimer's disease via the Nrf-2/HO-1 pathway.

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]. Li C, et al. Pyridoxine exerts antioxidant effects in cell model of Alzheimer's disease via the Nrf-2/HO-1 pathway. *Cell Mol Biol (Noisy-le-grand).* 2018 Jul 30;64(10):119-124.

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