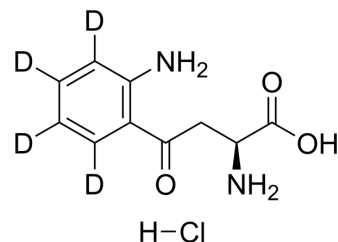


## L-Kynurenine-d<sub>4</sub>-1 hydrochloride

<b>Cat. No.:</b>	HY-104026S2		
<b>Molecular Formula:</b>	C <sub>10</sub> H <sub>9</sub> D <sub>4</sub> ClN <sub>2</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	248.7		
<b>Target:</b>	Isotope-Labeled Compounds		
<b>Pathway:</b>	Others		
<b>Storage:</b>	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



### SOLVENT & SOLUBILITY

#### In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
Solubility: ≥ 2.08 mg/mL (8.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.08 mg/mL (8.36 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.08 mg/mL (8.36 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

L-Kynurenine-d<sub>4</sub>-1 hydrochloride is the deuterium labeled L-Kynurenine (HY-104026). L-Kynurenine is a metabolite of the amino acid L-tryptophan. L-Kynurenine is an aryl hydrocarbon receptor agonist<sup>[1][2]</sup>.

#### 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<sup>[1]</sup>.  
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

- Nozaki K, et al. Neuroprotective effects of L-kynurenine on hypoxia-ischemia and NMDA lesions in neonatal rats. *J Cereb Blood Flow Metab.* 1992 May;12(3):400-7.
- Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019 Feb;53(2):211-220.

---

**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](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA