Product Data Sheet

Droxidopa-13C₂,15N hydrochloride

 Cat. No.:
 HY-13458S1

 CAS No.:
 1329556-63-9

 Molecular Formula:
 $C_7^{13}C_2H_{12}Cl^{15}NO_5$

Molecular Weight: 252.63

Target: Adrenergic Receptor; Isotope-Labeled Compounds

Pathway: GPCR/G Protein; Neuronal Signaling; Others

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

HO
$$H_2^{13}C$$
 OH $H_2^{15}N$

BIOLOGICAL ACTIVITY

Description	Droxidopa- 13 C ₂ , 15 N (hydrochloride) is deuterium labeled Droxidopa. Droxidopa(L-DOPS), the mixture of Droxidopa (w/w80%) and Pharmaceutical starch (w/w20%), acts as a proagent to the neurotransmitters norepinephrine (noradrenaline) and epinephrine (adrenaline); Droxidopa(L-DOPS) is capable of crossing the protective blood-brain barrier[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]. Coll M, et al. Droxidopa, an oral norepinephrine precursor, improves hemodynamic and renal alterations of portal hypertensive rats. Hepatology. 2012 Nov;56(5):1849-60.

[3]. Mathias CJ. L-dihydroxyphenylserine (Droxidopa) in the treatment of orthostatic hypotension: the European experience. Clin Auton Res. 2008 Mar;18 Suppl 1:25-9.

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

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