L-Arginine-$^{13}C_6$ hydrochloride

Cat. No.: HY-N0455AS6

CAS No.: 201740-91-2

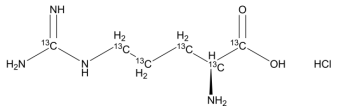
Molecular Formula: $^{13}C_6H_{15}ClN_4O_2$

Molecular Weight: 216.62

Target: NO Synthase; Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Immunology/Inflammation; Metabolic Enzyme/Protease; Others

Storage: -20°C, stored under nitrogen, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (stored under nitrogen, away from moisture)



SOLVENT & SOLUBILITY

In Vitro

H_2O : 250 mg/mL (1154.09 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	4.6164 mL	23.0819 mL	46.1638 mL
	5 mM	0.9233 mL	4.6164 mL	9.2328 mL
	10 mM	0.4616 mL	2.3082 mL	4.6164 mL

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

BIOLOGICAL ACTIVITY

Description

L-Arginine-$^{13}C_6$ (hydrochloride) is the ^{13}C-labeled L-Arginine hydrochloride. L-Arginine hydrochloride ((S)-(+)-Arginine hydrochloride) is the nitrogen donor for synthesis of nitric oxide, a potent vasodilator that is deficient during times of sickle cell crisis.

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.

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

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