MedChemExpress

## Product Data Sheet

## L-Arginine-1- ${ }^{13} \mathrm{C}$ hydrochloride

| Cat. No.: | HY-N0455AS3 |
| :--- | :--- |
| CAS No.: | $2483735-41-5$ |
| Molecular Formula: | $\mathrm{C}_{5}{ }^{13} \mathrm{CH}_{15} \mathrm{ClN}_{4} \mathrm{O}_{2}$ |
| Molecular Weight: | 211.65 |
| Target: | NO Synthase; Endogenous Metabolite |
| Pathway: | Immunology/Inflammation; Metabolic Enzyme/Protease |
| Storage: | Please store the product under the recommended conditions in the Certificate of |
|  | Analysis. |



## BIOLOGICAL ACTIVITY

Description

In Vitro

L-Arginine-1- ${ }^{13} \mathrm{C}$ (hydrochloride) is the ${ }^{13} \mathrm{C}$-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.

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

11. 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.

