L-Glutamine-1-¹³C

MedChemExpress

| Cat. No.: | HY-N0390S5 | | | | |
|--------------------|---|-------|----------|--|--|
| CAS No.: | 159663-16-8 | | | | |
| Molecular Formula: | C ₄ ¹³ CH ₁₀ N ₂ O ₃ | | | | |
| Molecular Weight: | 147.14 | | | | |
| Target: | mGluR; Ferroptosis; Endogenous Metabolite | | | | |
| Pathway: | GPCR/G Protein; Neuronal Signaling; Apoptosis; Metabolic Enzyme/Protease | | | | |
| Storage: | Powder | -20°C | 3 years | | |
| | | 4°C | 2 years | | |
| | In solvent | -80°C | 6 months | | |
| | | -20°C | 1 month | | |

SOLVENT & SOLUBILITY

| | Solvent Mass Concentration | 1 mg | 5 mg | 10 mg |
|------------------------------|-------------------------------|-----------|------------|------------|
| Preparing Stock Solutions | 1 mM | 6.7962 mL | 33.9812 mL | 67.9625 mL |
| | 5 mM | 1.3592 mL | 6.7962 mL | 13.5925 mL |
| | 10 mM | 0.6796 mL | 3.3981 mL | 6.7962 mL |

| BIOLOGICAL ACTI | VITY |
|-----------------|---|
| Description | L-Glutamine-1- ¹³ C is the ¹³ C-labeled L-Glutamine. L-Glutamine (L-Glutamic acid 5-amide) is a non-essential amino acid present abundantly throughout the body and involved in many metabolic processes. L-Glutamine provides a source of carbons for oxidation in some cells[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.

Product Data Sheet

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 H_2N

0 ¹³C

 $\bar{N}H_2$

OH

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

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