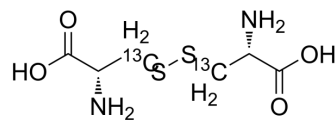


L-Cystine-3,3'-¹³C₂

| | |
|---------------------------|--|
| Cat. No.: | HY-N0394S4 |
| CAS No.: | 2483736-13-4 |
| Molecular Formula: | C ₄ ¹³ C ₂ H ₁₂ N ₂ O ₄ S ₂ |
| Molecular Weight: | 242.29 |
| Target: | Ferroptosis; Endogenous Metabolite |
| Pathway: | Apoptosis; Metabolic Enzyme/Protease |
| Storage: | Please store the product under the recommended conditions in the Certificate of Analysis. |



BIOLOGICAL ACTIVITY

| | |
|--------------------|--|
| Description | L-Cystine-3,3'- ¹³ C ₂ is the ¹³ C labeled L-Cystine[1]. L-Cystine is an amino acid and intracellular thiol, which plays a critical role in the regulation of cellular processes[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 Feb;53(2):211-216.
- [2]. Ohtsu I, et al. Uptake of L-cystine via an ABC transporter contributes defense of oxidative stress in the L-cystine export-dependent manner in *Escherichia coli*. *PLoS One*. 2015 Apr 2;10(3):e0120619.

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

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