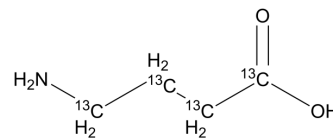


γ -Aminobutyric acid- $^{13}\text{C}_4$

| | |
|---------------------------|--|
| Cat. No.: | HY-N0067S3 |
| Molecular Formula: | $^{13}\text{C}_4\text{H}_9\text{NO}_2$ |
| Molecular Weight: | 107.09 |
| Target: | GABA Receptor; Endogenous Metabolite; Isotope-Labeled Compounds |
| Pathway: | Membrane Transporter/Ion Channel; Neuronal Signaling; Metabolic Enzyme/Protease; Others |
| Storage: | 4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light) |



SOLVENT & SOLUBILITY

In Vitro

H₂O : ≥ 50 mg/mL (466.90 mM)
 H₂O : ≥ 50 mg/mL (466.90 mM)
 * "≥" means soluble, but saturation unknown.

| Preparing Stock Solutions | Solvent Concentration | Mass | | |
|---------------------------|-----------------------|-----------|------------|------------|
| | | 1 mg | 5 mg | 10 mg |
| | 1 mM | 9.3379 mL | 46.6897 mL | 93.3794 mL |
| | 5 mM | 1.8676 mL | 9.3379 mL | 18.6759 mL |
| | 10 mM | 0.9338 mL | 4.6690 mL | 9.3379 mL |

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

BIOLOGICAL ACTIVITY

Description

γ -Aminobutyric acid- $^{13}\text{C}_4$ is the ^{13}C -labeled γ -Aminobutyric acid. γ -Aminobutyric acid (4-Aminobutyric acid) is a major inhibitory neurotransmitter in the adult mammalian brain[1][2], binding to the ionotropic GABA receptors (GABAA receptors) and metabotropic receptors (GABAB receptors)[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.

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

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