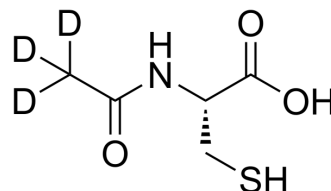


Acetylcysteine-d₃

Cat. No.:	HY-B0215S
CAS No.:	131685-11-5
Molecular Formula:	C ₅ H ₆ D ₃ NO ₃ S
Molecular Weight:	166.21
Target:	Apoptosis; Influenza Virus; Ferroptosis; Endogenous Metabolite; Reactive Oxygen Species; Isotope-Labeled Compounds
Pathway:	Apoptosis; Anti-infection; Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Acetylcysteine-d ₃ is the deuterium labeled Acetylcysteine. Acetylcysteine (N-Acetylcysteine) is a mucolytic agent which reduces the thickness of the mucus. Acetylcysteine is a ROS inhibitor[1]. Acetylcysteine is a cysteine precursor, prevents hemin-induced ferroptosis by neutralizing toxic lipids generated by arachidonate-dependent activity of 5-lipoxygenases[5]. Acetylcysteine induces cell apoptosis[2][3]. Acetylcysteine also has anti-influenza virus activities[7].
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.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA