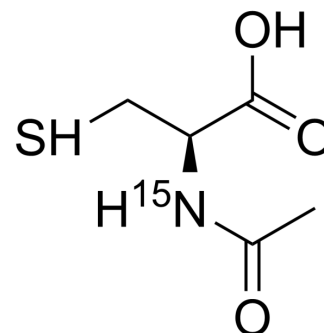


## Acetylcysteine-<sup>15</sup>N

<b>Cat. No.:</b>	HY-B0215S1
<b>Molecular Formula:</b>	C <sub>5</sub> H <sub>9</sub> <sup>15</sup> N <sub>3</sub> S
<b>Molecular Weight:</b>	164.19
<b>Target:</b>	Apoptosis; Influenza Virus; Ferroptosis; Endogenous Metabolite; Reactive Oxygen Species; Isotope-Labeled Compounds
<b>Pathway:</b>	Apoptosis; Anti-infection; Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB; Others
<b>Storage:</b>	Please store the product under the recommended conditions in the Certificate of Analysis.



### BIOLOGICAL ACTIVITY

<b>Description</b>	Acetylcysteine- <sup>15</sup> N (N-Acetylcysteine- <sup>15</sup> N) is the <sup>15</sup> N-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].
<b>In Vitro</b>	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 <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

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- [7]. Kalimeris K, et al. N-acetylcysteine ameliorates liver injury in a rat model of intestinal ischemia reperfusion. *J Surg Res.* 2016 Dec;206(2):263-272.
- [8]. Garigliany MM, et al. N-acetylcysteine lacks universal inhibitory activity against influenza A viruses. *J Negat Results Biomed.* 2011 May 9;10:5.

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

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