



LKT Laboratories, Inc.

N-Acetyl-L-Cysteine

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Product Information

Product ID A0918

CAS No. 616-91-1

Chemical Name L- α -Acetamido- β -mercaptopropionic acid

Synonym Acetylcysteine, Brunac, Fabrol, Fluimucil, Fluprowit, Mucosil

Formula C₅H₉NO₃S

Formula Wt. 163.20

Melting Point 106-108°C

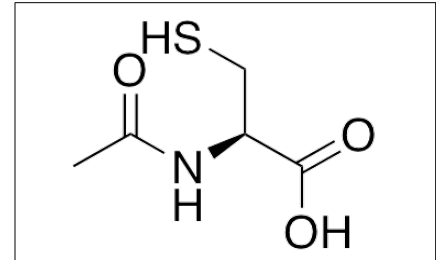
Purity \geq 98%

Solubility Soluble in water.

Store Temp Ambient

Ship Temp Ambient

Description N-Acetyl-L-cysteine exhibits antioxidative, mucolytic, anti-inflammatory, antiviral, antipsychotic, and neuromodulatory activities. N-Acetyl-L-cysteine has clinically been used to treat acetaminophen overdose; it is occasionally commercially sold as a supplement. N-Acetyl-L-cysteine acts as a scavenger of ROS, decreasing oxidative stress in a variety of models. In vitro, this compound also inhibits TNF- α -induced increases in IL-6 release and NF- κ B activation. N-Acetyl-L-cysteine also inhibits hepatitis B virus replication by suppressing viral assembly. Clinically, N-acetyl-L-cysteine displays potential benefit in the treatment of various mood disorders as it modulates reward and reinforcement signaling.



Bulk quantities available upon request

Product ID	Size
A0918	10 g
A0918	25 g
A0918	100 g

References Lim JH, Lee YM, Park SR, et al. Anticancer activity of hispidin via reactive oxygen species-mediated apoptosis in colon cancer cells. *Anticancer Res.* 2014 Aug;34(8):4087-93. PMID: 25075033.

Grosicka-Maciąg E, Szumiło M, Czczot H, et al. Modulation of antioxidant defense system by the dithiocarbamate fungicides Maneb and Zineb in Chinese hamster V79 cells and the role of N-acetyl-L-cysteine. *Food Chem Toxicol.* 2013 Oct;60:130-4. PMID: 23871785.

Dean O, Giorlando F, Berk M. N-acetylcysteine in psychiatry: current therapeutic evidence and potential mechanisms of action. *J Psychiatry Neurosci.* 2011 Mar;36(2):78-86. PMID: 21118657.

Weiss L, Hildt E, Hofschneider PH. Anti-hepatitis B virus activity of N-acetyl-L-cysteine (NAC): new aspects of a well-established drug. *Antiviral Res.* 1996 Aug;32(1):43-53. PMID: 8863995.

Shibanuma M, Kuroki T, Nose K. Inhibition by N-acetyl-L-cysteine of interleukin-6 mRNA induction and activation of NF kappa B by tumor necrosis factor alpha in a mouse fibroblastic cell line, Balb/3T3. *FEBS Lett.* 1994 Oct 10;353(1):62-6. PMID: 7926024.

Caution: This product is intended for laboratory and research use only. It is not for human or drug use.