



LKT Laboratories, Inc.

S-Methyl-L-cysteine

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Product Information

Product ID M1564

CAS No. 1187-84-4

Chemical Name

Synonym (R)-2-Amino-3-(methylmercapto)propionic acid, SMLC

Formula C₄H₉NO₂S

Formula Wt. 135.18

Melting Point 219 -221°C

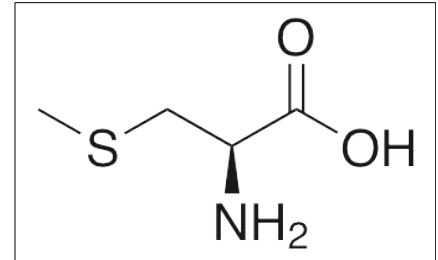
Purity ≥99%

Solubility Soluble in 0.1 N NaOH (1% w/v) or water (50 mg/mL).

Store Temp 4°C

Ship Temp Ambient

Description S-Methyl-L-cysteine (SMLC) is found in onions, garlic, cabbage, and legumes; it exhibits antioxidative, neuroprotective, and anti-obesity activities. SMLC is a substrate of the catalytic antioxidant system mediated by methionine sulfoxide reductase A. This compound is involved in extracellular D-serine signaling and enzymatic reduction of oxidative stress, holding potential therapeutic benefit for diseases characterized by NMDA-receptor dysfunction, such as Parkinson's Disease. SMLC also acts as a potential anti-obesity agent, inhibiting oil drop formation in rat white pre-adipose tissue.



Bulk quantities available upon request

Product ID	Size
M1564	1 g
M1564	5 g
M1564	25 g

References Ishiwata S, Ogata S, Umino A, et al. Increasing effects of S-methyl-L-cysteine on the extracellular D-serine concentrations in the rat medial frontal cortex. *Amino Acids*. 2013 May;44(5):1391-5. PMID: 23417484.

Yoshinari O, Shiojima Y, Igarashi K. Anti-obesity effects of onion extract in Zucker diabetic fatty rats. *Nutrients*. 2012 Oct 22;4(10):1518-26. PMID: 23201769.

Wassef R, Haenold R, Hansel A, et al. Methionine sulfoxide reductase A and a dietary supplement S-methyl-L-cysteine prevent Parkinson's-like symptoms. *J Neurosci*. 2007 Nov 21;27(47):12808-16. PMID: 18032652.

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