

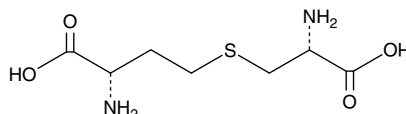
Product Information



L-(+)-Cystathionine

Item No. 16061

CAS Registry No.: 56-88-2
Formal Name: S-[(2R)-2-amino-2-carboxyethyl]-L-homocysteine
MF: C₇H₁₄N₂O₄S
FW: 222.3
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that L-(+)-cystathionine be stored as supplied at -20°C. It should be stable for at least two years.

L-(+)-Cystathionine is supplied as a crystalline solid. Aqueous solutions of L-(+)-cystathionine can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of L-(+)-cystathionine in PBS, pH 7.2, is approximately 0.25 mg/ml. We do not recommend storing the aqueous solution for more than one day.

L-(+)-Cystathionine is a dipeptide formed by serine and homocysteine. Transsulfuration of methionine yields homocysteine, which combines with serine to form this precursor of cysteine.^{1,2} L-(+)-Cystathionine is largely expressed in the mammalian brain and deficiency can indicate the presence of metabolic disorders such as cystathioninuria.³

References

1. Steegborn, C., Clausen, T., Sondermann, P., *et al.* Kinetics and inhibition of recombinant human cystathionine γ-lyase. Toward the rational control of transsulfuration. *J. Biol. Chem.* **274**(18), 12675-12684 (1999).
2. Finkelstein, J.D. The metabolism of homocysteine: Pathways and regulation. *Eur. J. Pediatr.* **157**(Suppl 2), S40-S44 (1998).
3. Nishi, T., Tanaka, K., Tanaka, Y., *et al.* Accumulation of L-cystathionine by an *Escherichia coli* mutant deficient in cystathionine beta-lyase. *J. Biosci. Bioeng.* **94**(2), 178-181 (2002).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16061

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY; NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

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