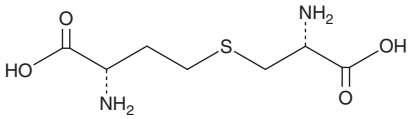
PRODUCT INFORMATION

L-(+)-Cystathionine

Item No. 16061

CAS Registry No.:	56-88-2
Formal Name:	S-[(2R)-2-amino-2-carboxyethyl]-L-homocysteine
MF:	$C_7H_{14}N_2O_4S$
FW:	222.3
Purity:	≥98%
Supplied as:	A crystalline solid
Storage:	-20°C
Stability:	≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

L-(+)-Cystathionine is supplied as a crystalline solid. A stock solution may be made by dissolving the L-(+)-cystathionine in the solvent of choice, which should be purged with an inert gas. L-(+)-Cystathionine is soluble in the organic solvent 1N HCl at a concentration of approximately 10 mg/ml.

Description

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).

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