

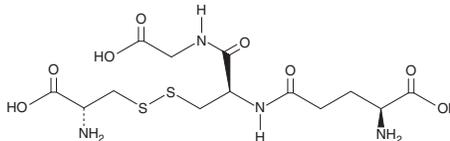
PRODUCT INFORMATION



L-Cysteine-glutathione disulfide

Item No. 17582

CAS Registry No.: 13081-14-6
Formal Name: L-γ-glutamyl-L-cysteinyl-glycine disulfide with L-cysteine
Synonyms: CYSH-GSH, L-CySSG
MF: C₁₃H₂₂N₄O₈S₂
FW: 426.5
Purity: ≥95%
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-Cysteine-glutathione disulfide is supplied as a crystalline solid. A stock solution may be made by dissolving the L-cysteine-glutathione disulfide in the solvent of choice. L-Cysteine-glutathione disulfide is soluble in water, at a concentration of approximately 20 mg/ml.

L-Cysteine-glutathione disulfide is sparingly soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. For biological experiments, we suggest that organic solvent-free aqueous solutions of L-cysteine-glutathione disulfide be prepared by directly dissolving the crystalline solid aqueous buffers. The solubility of L-cysteine-glutathione disulfide in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

L-Cysteine-glutathione disulfide, a glutathione derivative endogenous to mammalian cells, is comprised of the oxidized form of free glutathione tripeptide linked via a disulfide bond to L-cysteine.¹ It has been shown to protect mice against acetaminophen-induced hepatotoxicity.²

References

1. Eriksson, S.A. and Mannervik, B. The reduction of the L-cysteine-glutathione mixed disulfide in rat liver. Involvement of an enzyme catalyzing thiol-disulfide interchange. *FEBS Lett.* **7(1)**, 26-28 (1970).
2. Berkeley, L.I., Cohen, J.F., Crankshaw, D.L., *et al.* Hepatoprotection by L-cysteine-glutathione mixed disulfide, a sulfhydryl-modified prodrug of glutathione. *J. Biochem. Mol. Toxicol.* **17(2)**, 95-97 (2003).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/08/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM