Inhibitors



Product Data Sheet

L-Glutathione reduced

Cat. No.: HY-D0187 **CAS No.:** 70-18-8

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Molecular Weight: 307.32

Target: Endogenous Metabolite; Reactive Oxygen Species; Ferroptosis

Pathway: Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κΒ; Apoptosis

Storage: 4°C, protect from light, stored under nitrogen

* The compound is unstable in solutions, freshly prepared is recommended.

SOLVENT & SOLUBILITY

In Vitro H₂O: 62.5 mg/mL (203.37 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	3.2539 mL	16.2697 mL	32.5394 mL
	5 mM	0.6508 mL	3.2539 mL	6.5079 mL
	10 mM	0.3254 mL	1.6270 mL	3.2539 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo 1. Add each solvent one by one: PBS

Solubility: 100 mg/mL (325.39 mM); Clear solution; Need ultrasonic and warming and heat to 60°C

BIOLOGICAL ACTIVITY

Description	L-Glutathione reduced (GSH; γ-L-Glutamyl-L-cysteinyl-glycine) is an endogenous antioxidant and is capable of scavenging oxygen-derived free radicals.	
IC ₅₀ & Target	Human Endogenous Metabolite	
In Vitro	L-Glutathione reduced is a non-protein thiol widely exists in living cells. L-Glutathione reduced plays important biological functions in the organism, including protein and DNA synthesis, enzyme activity, metabolism and cell protection. L-Glutathione reduced is capable of scavenging oxygen-derived free radicals and is established to be a marker of oxidative stress ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

CUSTOMER VALIDATION

- Signal Transduct Target Ther. 2021 May 28;6(1):188.
- Signal Transduct Target Ther. 2020 May 8;5(1):51.
- Acta Pharm Sin B. 2021 Dec;11(12):4045-4054.
- J Allergy Clin Immunol. 2022 Apr 20;S0091-6749(22)00541-3.
- Dev Cell. 2024 Jan 19:S1534-5807(24)00003-0.

See more customer validations on $\underline{www.MedChemExpress.com}$

REFERENCES

[1]. Pereira-Rodrigues N, et al. Electrocatalytic activity of cobalt phthalocyanine CoPc adsorbed on a graphite electrode for the oxidation of reduced L-glutathione (GSH) and the reduction of its disulfide (GSSG) at physiological pH. Bioelectrochemistry. 2007 Jan;70(1):147-54.

Caution: Product has not been fully validated for medical applications. For research use only.

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