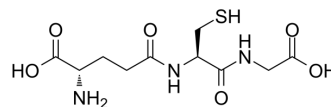


## L-Glutathione reduced

Cat. No.:	HY-D0187
CAS No.:	70-18-8
Molecular Formula:	C <sub>10</sub> H <sub>17</sub> N <sub>3</sub> O <sub>6</sub> S
Molecular Weight:	307.32
Target:	Endogenous Metabolite; Reactive Oxygen Species; Ferroptosis
Pathway:	Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB; Apoptosis
Storage:	4°C, protect from light, stored under nitrogen * The compound is unstable in solutions, freshly prepared is recommended.



### SOLVENT & SOLUBILITY

In Vitro	H <sub>2</sub> O : 62.5 mg/mL (203.37 mM; Need ultrasonic)				
		Solvent Concentration	Mass 1 mg	5 mg	10 mg
	Preparing Stock Solutions	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 <sub>50</sub> & 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 <sup>[1]</sup> . 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.
- Adv Sci (Weinh). 2024 Dec 16:e2411479.
- Nat Chem Biol. 2024 Jul 26.
- Acta Pharm Sin B. 2021 Dec;11(12):4045-4054.

See more customer validations on [www.MedChemExpress.com](http://www.MedChemExpress.com)

## REFERENCES

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[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.

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

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