Product Data Sheet

Glutathione oxidized

Cat. No.: HY-D0844 CAS No.: 27025-41-8 Molecular Formula: $C_{20}H_{32}N_6O_{12}S_2$ Molecular Weight: 612.63

Target: Endogenous Metabolite; Reactive Oxygen Species

Pathway: Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB

Sealed storage, away from moisture Storage:

> Powder -80°C 2 years

-20°C 1 year

* In solvent: -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)

SOLVENT & SOLUBILITY

H₂O: 250 mg/mL (408.08 mM; Need ultrasonic) In Vitro

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.6323 mL	8.1615 mL	16.3231 mL
	5 mM	0.3265 mL	1.6323 mL	3.2646 mL
	10 mM	0.1632 mL	0.8162 mL	1.6323 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 (163.23 mM); Clear solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description Glutathione oxidized (L-Glutathione oxidized) is produced by the oxidation of glutathione. Detoxification of reactive oxygen species is accompanied by production of glutathione oxidized. Glutathione oxidized can be used for the research of sickle cells and erythrocytes^{[1][2]}. Human Endogenous Metabolite IC₅₀ & Target In Vitro Increased efflux of Glutathione oxidized leads to glutathione depletion and may weaken the antioxidant defense of sickle erythrocytes^[1]. Glutathione oxidized (400 μM) inhibits epithelial sodium channel activity in primary alveolar epithelial T2 cells^[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Page 1 of 2

CUSTOMER VALIDATION

- Adv Sci (Weinh). 2022 Oct 18;e2203088.
- Microbiol Spectr. 2023 Sep 21;e0267123.
- SSRN. 2023 Nov 17.

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

REFERENCES

[1]. Downs CA, et al. Oxidized glutathione (GSSG) inhibits epithelial sodium channel activity in primary alveolar epithelial cells. Am J Physiol Lung Cell Mol Physiol. 2015 May 1;308(9):L943-52.

[2]. Nur E, et al. Increased efflux of oxidized glutathione (GSSG) causes glutathione depletion and potentially diminishes antioxidant defense in sickle erythrocytes. Biochim Biophys Acta. 2011 Nov;1812(11):1412-7.

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

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