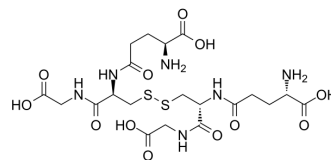


## Glutathione oxidized

<b>Cat. No.:</b>	HY-D0844
<b>CAS No.:</b>	27025-41-8
<b>Molecular Formula:</b>	C <sub>20</sub> H <sub>32</sub> N <sub>6</sub> O <sub>12</sub> S <sub>2</sub>
<b>Molecular Weight:</b>	612.63
<b>Target:</b>	Endogenous Metabolite; Reactive Oxygen Species
<b>Pathway:</b>	Metabolic Enzyme/Protease; Immunology/Inflammation; NF-κB
<b>Storage:</b>	Sealed storage, away from moisture
	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

<b>In Vitro</b>	H <sub>2</sub> O : 250 mg/mL (408.08 mM; Need ultrasonic)				
		Solvent Concentration	Mass		
	<b>Preparing Stock Solutions</b>		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.					
<b>In Vivo</b>	1. Add each solvent one by one: PBS Solubility: 100 mg/mL (163.23 mM); Clear solution; Need ultrasonic				

### BIOLOGICAL ACTIVITY

<b>Description</b>	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 <sup>[1][2]</sup> .
<b>IC<sub>50</sub> &amp; Target</b>	Human Endogenous Metabolite
<b>In Vitro</b>	Increased efflux of Glutathione oxidized leads to glutathione depletion and may weaken the antioxidant defense of sickle erythrocytes <sup>[1]</sup> . Glutathione oxidized (400 μM) inhibits epithelial sodium channel activity in primary alveolar epithelial T2 cells <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

---

## CUSTOMER VALIDATION

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

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: [tech@MedChemExpress.com](mailto:tech@MedChemExpress.com)

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA