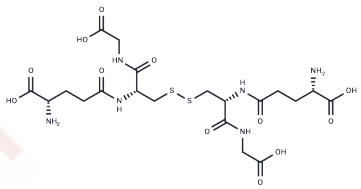
Data Sheet (Cat.No.T1085L)

TargetMol

Glutathione oxidized

Chemical Properties



CAS No. : 27025-41-8

Formula: C20H32N6O12S2

Molecular Weight: 612.63

Storage: Keep away from moisture
Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Glutathione oxidized (L(-) -glutathione) is the oxidized form of Glutathione, which is a major antioxidant and antidote in cells. Glutathione oxidized can be used to study sickle cells and red blood cells.
Targets(IC50)	Reactive Oxygen Species,Endogenous Metabolite,Glutathione reductase,ROS
In vitro	**METHODS**: Sickle erythrocytes were treated with Glutathione oxidized (10 μmol/L) for 0, 90, 150, and 210 minutes to detect the difference in GSH concentration between intracellular and extracellular. **RESULTS**: Increased efflux of Glutathione oxidized causes glutathione depletion and may impair the antioxidant defense of sickle erythrocytes. [1]
In vivo	**METHODS**: To study the effect of Glutathione oxidized on brain injury, Glutathione oxidized (100 mM) was injected into wild type mice. **RESULTS**: Glutathione oxidized causes significant brain damage in wild type mice. [2]

Solubility Information

Solubility	DMSO: 1.39 mg/mL (2.27 mM),Sonication is recommended. H2O: 165 mg/mL (269.33 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
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
50 mM	0.0326 mL	0.1632 mL	0.3265 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

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.
Park HA, et al. Glutathione disulfide induces neural cell death via a 12-lipoxygenase pathway. Cell Death Differ. 2009 Aug;16(8):1167-79.