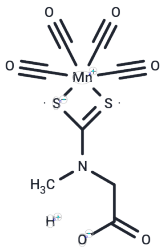
Data Sheet (Cat.No.T14999)

TargetMol

CORM-401

Chemical Properties



CAS No. : 1001015-18-4

Formula: C8H6MnNO6S2

Molecular Weight: 331.2

Storage: 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	CORM-401 is an oxidant-sensitive CO-releasing molecule used in the research of oxidative stress-mediated pathologies and inflammation [inflammatory].
Targets(IC50)	Reactive Oxygen Species,Antibiotic,ROS
In vitro	CORM-401 (0.5, 1 mM) induces a sustained increase in the oxygen consumption rate of endothelial EA.hy926 cells; CORM-401 (10, 30, 100 μM) induces a concentration-dependent increase in OCR while reducing ECAR [2]; CORM-401 (50 μM; 1 h) significantly reduces ROS generation and cell death induced by TNF-α/CHX and H2O2 [3]; CORM-401 (10, 30, 100 μM) induces a concentration-dependent increase in OCR, while reducing ECAR, while CORM-401 (100 μM; 1 h) induces NO production in endothelial EA.hy926 cells. In addition, CORM-401 (30 μM) induces peak calcium signals and enhances the coupling of endoplasmic reticulum and plasma membrane storage calcium channels

Solubility Information

Solubility	DMSO: 15 mg/mL (45.29 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble) (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.0193 mL	15.0966 mL	30.1932 mL
5 mM	0.6039 mL	3.0193 mL	6.0386 mL
10 mM	0.3019 mL	1.5097 mL	3.0193 mL
50 mM	0.0604 mL	0.3019 mL	0.6039 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

CORM-401, et al. Vascular and angiogenic activities of CORM-401, an oxidant-sensitive CO-releasing molecule. Biochem Pharmacol. 2016 Feb 15;102:64-77.
Kaczara P, et al. Carbon monoxide released by CORM-401 uncouples mitochondrial respiration and inhibits glycolysis in endothelial cells: A role for mitoBKCa channels. Biochim Biophys Acta. 2015 Oct;1847(10):1297-309.
Babu D, et al. Differential Effects of CORM-2 and CORM-401 in Murine Intestinal Epithelial MODE-K Cells under Oxidative Stress. Front Pharmacol. 2017 Feb 8;8:31.
Kaczara P, et al. CORM-401 induces calcium signalling, NO increase and activation of pentose phosphate pathway in endothelial cells. FEBS J. 2018 Apr;285(7):1346-1358.

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