# Data Sheet (Cat.No.T14999)



#### CORM-401

#### **Chemical Properties**

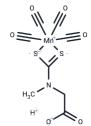
CAS No.: 1001015-18-4

Formula: C8H6MnNO6S2

Molecular Weight: 331.2

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



## **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)	Antibiotic
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 $\mu$ M) induces a concentration-dependent increase in OCR while reducing ECAR [2]; CORM-401 (50 $\mu$ M; 1 h) significantly reduces ROS generation and cell death induced by TNF- $\alpha$ /CHX and H2O2 [3]; CORM-401 (10, 30, 100 $\mu$ M) induces a concentration-dependent increase in OCR, while reducing ECAR, while CORM-401 (100 $\mu$ M; 1 h) induces NO production in endothelial EA.hy926 cells. In addition, CORM-401 (30 $\mu$ M) induces peak calcium signals and enhances the coupling of endoplasmic reticulum and plasma membrane storage calcium channels [4].

### **Solubility Information**

Solubility	DMSO: 15 mg/mL (45.29 mM), Sonication is recommended.	MSO: 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.

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#### 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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