

CORM-3

Chemical Properties

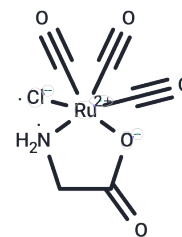
CAS No. : 475473-26-8

Formula: C₅H₄ClNO₅Ru

Molecular Weight: 294.61

Storage: Store at low temperature, Store under nitrogen
 Pure form: -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-3 is a carbon monoxide-releasing molecule with anti-inflammatory and cardioprotective activity.
Targets(IC50)	NF-κB, NOD-like Receptor (NLR)
In vitro	CORM-3 protects against hypoxia-reoxygenation and oxidative stress by promoting CO release in cardiac cells. [1] CORM-3 attenuates the inflammatory response induced by LPS in RAW264.7 murine macrophages. [2] CORM-3 also uncouples mitochondrial respiration via interaction with the phosphate carrier. [4]
In vivo	CORM-3 (40 mg/kg i.p.) prolongs the survival of murine cardiac grafts and attenuates organ rejection in CBA mice transplanted with BALB/c hearts. [1] CORM-3 (20 mg/kg i.p.) decreases cellular infiltration, joint inflammation and destruction in a collagen-induced arthritis mouse model. [3]

Solubility Information

Solubility	DMSO: 50 mg/mL (169.72 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 3.3 mg/mL (11.2 mM), Sonication is recommended. <i>Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.</i>

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.3943 mL	16.9716 mL	33.9432 mL
5 mM	0.6789 mL	3.3943 mL	6.7886 mL
10 mM	0.3394 mL	1.6972 mL	3.3943 mL
50 mM	0.0679 mL	0.3394 mL	0.6789 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

Clark JE, et al. *Circ Res*. 2003, 93(2), e2-8.

Tian X, Liu X, Wang A, et al. Bioluminescence Imaging of Carbon Monoxide in Living Cells and Nude Mice Based on Pd0-Mediated Tsuji-Trost Reaction. *Analytical chemistry*. 2018 May 1;90(9):5951-5958.

Sawle P, et al. *Br J Pharmacol*. 2005, 145(6), 800-810.

Ferrándiz ML, et al. *Ann Rheum Dis*. 2008 Sep;67(9):1211-7.

Long R, et al. *Biochim Biophys Acta*. 2014, 1837(1), 201-209.

Huang Y, et al. Carbon monoxide (CO) inhibits hydrogen peroxide (H2O2)-induced oxidative stress and the activation of NF- κ B signaling in lens epithelial cells. *Exp Eye Res*. 2018 Jan;166:29-39.

Tian X, Liu X, Wang A, et al. Bioluminescence Imaging of Carbon Monoxide in Living Cells and Nude Mice Based on Pd0-Mediated Tsuji-Trost Reaction[J]. *Analytical chemistry*. 2018 May 1;90(9):5951-5958.

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