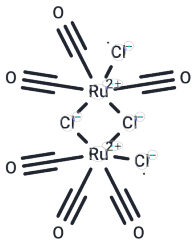
Data Sheet (Cat.No.T39795)

TargetMol

Tricarbonyldichlororuthenium(II) dimer

Chemical Properties



CAS No. : 22594-69-0

Formula: C6Cl4O6Ru2

Molecular Weight: 512.01

Storage: Keep away from moisture,Keep away from direct sunlight
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	Tricarbonyldichlororuthenium(II) dimer (CORM-2) is a CO-releasing molecule with anti-inflammatory, antioxidant, and gastroprotective effects. It also modulates potassium channels independently of CO.
Targets(IC50)	Others,Antioxidant,NO Synthase,STAT,Interleukin,P2X Receptor,Potassium Channel

Solubility Information

Solubility	H2O: insoluble or slightly soluble DMSO: 24 mg/mL (46.87 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: 2.5 mg/mL (4.88 mM),Sonication is recommended. *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.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9531 mL	9.7654 mL	19.5309 mL
5 mM	0.3906 mL	1.9531 mL	3.9062 mL
10 mM	0.1953 mL	0.9765 mL	1.9531 mL
50 mM	0.0391 mL	0.1953 mL	0.3906 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

Magierowska K, et, al. Oxidative gastric mucosal damage induced by ischemia/reperfusion and the mechanisms of its prevention by carbon monoxide-releasing tricarbonyldichlororuthenium (II) dimer. Free Radic Biol Med. 2019 Dec; 145:198-208.

Choi EY, et al. Tricarbonyldichlororuthenium(II) dimer, the lipid-soluble carbon monoxide-releasing molecule, attenuates Prevotella intermedia lipopolysaccharide-induced production of nitric oxide and interleukin-1β in murine macrophages. Int Immunopharmacol. 2021 Jan;90:107190.