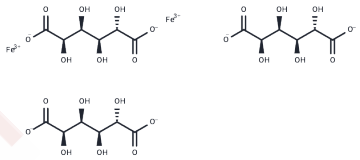
Data Sheet (Cat.No.T8132)

TargetMol

Iron sucrose

Chemical Properties



CAS No. : 8047-67-4

Formula: C18H24Fe2O24

Molecular Weight: 736.1

Storage: Keep away from direct sunlight,Keep away from moisture,Store at low temperature
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	Iron sucrose (Sucroferric oxyhydroxide) is treatment of iron deficiency anemia.
Targets(IC50)	Reactive Oxygen Species,ROS
Cell Research	in vitro experiments on human peritoneal, the mesothelial effect of elemental iron (in conc. 0.0001-1 mg mL-1) present in Venofer on their viability, growth and synthesis of IL-6 was studied. Additionally we evaluated with a fluorescent probe (2',7'-dichlorodihydro-fluorescein diacatate) generation of reactive oxygen species in cells exposed to iron sucrose. We also measured accumulation of iron in the cytoplasm of mesothelial cells after their in vitro exposure to Venofer[1].

Solubility Information

Solubility	DMSO: 40.83 mg/mL (55.47 mM),Sonication is recommended. H2O: 100 mg/mL (135.85 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 4.08 mg/mL (5.54 mM),Solution. *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	1.3585 mL	6.7926 mL	13.5851 mL
5 mM	0.2717 mL	1.3585 mL	2.717 mL
10 mM	0.1359 mL	0.6793 mL	1.3585 mL
50 mM	0.0272 mL	0.1359 mL	0.2717 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

Breborowicz M , Polubinska A , Tam P , et al. Effect of iron sucrose on human peritoneal mesothelial cells[J]. European Journal of Clinical Investigation, 2003, 33(12):1038-1044.
Kaneva K , Chow E , Rosenfield C G , et al. Intravenous Iron Sucrose for Children With Iron Deficiency Anemia[J]. Journal of Pediatric Hematology/oncology, 2017:1.