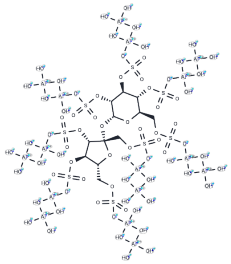
Data Sheet (Cat.No.T1338)

TargetMol

Sucralfate

Chemical Properties



CAS No. : 54182-58-0

Formula: C12H54Al16O75S8

Molecular Weight: 2086.75

Appearance: no data available

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

Biological Description

Description	Sucralfate (Sucrose octasulfate-aluminum complex) is a cytoprotective agent, an oral gastrointestinal medication primarily indicated for the treatment of active duodenal ulcers.
Targets(IC50)	FGFR,Antibacterial,Prostaglandin Receptor
In vitro	Sucralfate may inhibit intestinal epithelial motility by sterically interfering with adhesion to collagen I[3]. It protects RGMl cells from acid- and pepsin-induced damage[4].
In vivo	The protective effects of sucralfate against ARC(acute radiation colitis) may be partially due to the supression of radiation-induced apoptosis by way of p53 in the colon and the protection of the colonic epithelial stem cell region[2].
Cell Research	Sucralfate is dissolved or suspended in culture medium containing 20% FBS. Cells are incubated with the agent at 37°C under 5% CO2, in air for 0.5-4 h. In some cases, cells are treated with 10-5mol/L indomethacin for 4h before the addition of the agent to determine whether or not intracellular prostaglandins are involved in the protective mechanisms of sucralfate. (Only for Reference)

Solubility Information

Solubility	DMSO: 20.87 mg/mL (10 mM),Sonication is recommended. H2O: 0.4 mg/mL (0.20 mM),when pH is adjusted to 2 with HCl. Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.4792 mL	2.3961 mL	4.7921 mL
5 mM	0.0958 mL	0.4792 mL	0.9584 mL
10 mM	0.0479 mL	0.2396 mL	0.4792 mL
50 mM	0.0096 mL	0.0479 mL	0.0958 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.

Reference

Watanabe K, et al. Antimicrob Agents Chemother. 2004, 48(12):4582-8.
Matsuu-Matsuyama M, et al. J Radiat Res. 2006, 47(1):1-8.
Emenaker NJ, et al. Digestion. 1997, 58(1):34-42.
Furukawa O, et al. J Gastroenterol Hepatol. 1997, 12(5):353-9.