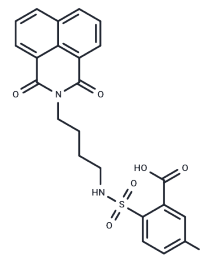


Radioprotectin-1

Chemical Properties

CAS No. : 1622006-09-0
 Formula: C₂₃H₁₉ClN₂O₆S
 Molecular Weight: 486.92
 Storage: 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	Radioprotectin-1 is a selective agonist of LPA ₂ with EC ₅₀ of 25 nM for murine LPA ₂ GPCR and exerts radioprotective and radiomitigative action.
Targets(IC ₅₀)	LPA Receptor, LPL Receptor
In vitro	In MEF and IEC-6 cells expressing LPA ₂ , Radioprotectin-1 (0, 0.1, 0.3, 1.0, and 3 μM) effectively reduces apoptosis induced by gamma-irradiation and the radiomimetic chemotherapeutic Adriamycin[1].
In vivo	In C57BL/6 female mice, Radioprotectin-1 (0.1 and 0.3 mg/kg; s.c.) decreases the mortality in models of the hematopoietic and gastrointestinal acute radiation syndrome [1].

Solubility Information

Solubility	DMSO: 150 mg/mL (308.06 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: 10 mg/mL (20.54 mM), Suspension. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (8.21 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	2.0537 mL	10.2686 mL	20.5373 mL
5 mM	0.4107 mL	2.0537 mL	4.1075 mL
10 mM	0.2054 mL	1.0269 mL	2.0537 mL
50 mM	0.0411 mL	0.2054 mL	0.4107 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

Kuo B, et al. The LPA2 receptor agonist Radioprotectin-1 spares Lgr5-positive intestinal stem cells from radiation injury in murine enteroids. *Cell Signal*. 2018 Nov;51:23-33.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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