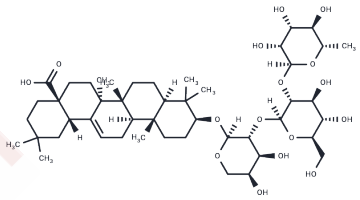
Data Sheet (Cat.No.T3878)

TargetMol

Raddeanin A

Chemical Properties



CAS No. : 89412-79-3

Formula: C47H76O16

Molecular Weight: 897.10

Storage: Store under nitrogen,Store at low temperature,Keep away from moisture
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	Raddeanin A is a natural triterpenoid saponin from Cyperus japonicus that inhibits histone deacetylase and is also a potent immunogenic cell death inducer with strong anti-angiogenic and anti-tumor activities.
Targets(IC50)	Apoptosis,HDAC
In vitro	**METHODS**: Raddeanin A (NSC-382873) (1, 2, 5 μM, 20 hours) treated B16-HMGB1-Gluc and MC38-HMGB1-Gluc cells, and measured HMGB1-Gluc luciferase activity and extracellular ATP levels. **RESULTS** Raddeanin A induced a significant increase in HMGB1-Gluc activity and ATP release in both B16 and MC38 cells in a dose-dependent manner.[2]
In vivo	**METHODS**: Raddeanin A (NSC-382873) (1, 2, and 4 mg/kg, intraperitoneally or intratumorally) was used to treat mice bearing a subcutaneous xenograft model of MC38 melanoma cells to investigate the effects of Raddeanin A on the immune control of tumor growth in vivo. **RESULTS** Raddeanin A caused considerable suppression of tumor size and weight in MC38 tumor-bearing mice; Raddeanin A effectively suppressed tumor growth in mice bearing B16 melanoma; however, intratumoral treatment with Raddeanin A did not significantly alter mouse body weight. [2]

Solubility Information

Solubility	DMSO: 82.50 mg/mL (91.96 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: 2.00 mg/mL (2.23 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	1.1147 mL	5.5735 mL	11.147 mL
5 mM	0.2229 mL	1.1147 mL	2.2294 mL
10 mM	0.1115 mL	0.5574 mL	1.1147 mL
50 mM	0.0223 mL	0.1115 mL	0.2229 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

Qian S,et al. Synthesis and biological evaluation of Raddeanin A, a triterpene saponin isolated from Anemone raddeana. Chem Pharm Bull (Tokyo). 2014;62(8):779-85.
Chen J, Zhang Y, Chen X, et al.Raddeanin A Inhibits Colorectal Cancer Growth and Ameliorates Oxaliplatin Resistance Through the WNT/β-Catenin Signaling Pathway[J]..Cancer Biotherapy & Radiopharmaceuticals.2024
Yin M,et al. Raddeanin A Enhances Mitochondrial DNA-cGAS/STING Axis-Mediated Antitumor Immunity by Targeting Transactive Responsive DNA-Binding Protein 4Adv Sci (Weinh). 2023 May;10(13):e2206737.
Guan YY,et al. Raddeanin A, a triterpenoid saponin isolated from Anemone raddeana, suppresses the angiogenesis and growth of human colorectal tumor by inhibiting VEGFR2 signaling. Phytomedicine. 2015 Jan 15; 22(1):103-10.