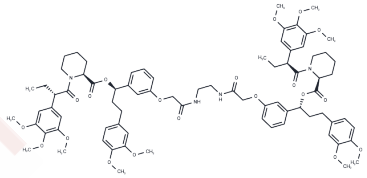
Data Sheet (Cat.No.T14298)

TargetMol

Rimiducid

Chemical Properties



CAS No. : 195514-63-7

Formula: C78H98N4O20

Molecular Weight: 1411.63

Storage: Powder: -20°C for 3 years
Actual storage temperature shall be subject to the COA.

Biological Description

Description	Rimiducid is a lipid-permeable tacrolimus analogue, homodimerizing an analogue of human protein fkbp12 and binding to wild-type fkbp12 with 1000-fold lower affinity. Rimiducid is a dimerizer agent that acts by cross-linking the FKBP domains. It dimerizes the Caspase 9 suicide switch and rapidly induces apoptosis.
Targets(IC50)	Apoptosis,Fatty Acid Synthase,FKBP
In vitro	AP1903, a bivalent 'dimerizer' drug that binds FKBP and induces Fas cross-linking.?A single 2-hour treatment eliminated approximately 80% of T cells, and multiple exposures induced further apoptosis.?T cells were eliminated regardless of their proliferation state, suggesting that the AP1903/Fas system, which contains only human components, is a promising alternative to HSV-tk for treating GVHD[2].
In vivo	Constitutive hGH secretion provides a convenient and accurate way to monitor the number of viable cells in vivo because hGH has a serum half-life of only ≈3 min in mice. Over 3 consecutive days, we implanted these cells i.m. into nude mice, and treated the animals i.v. with various doses of Rimiducid, and then determined serum hGH levels as a measure of the number of surviving cells. Rimiducid (AP1903; i.v.,0.01, 0.1, 1, 10, and 100 mg/kg) elicits a dose-dependent decrease in serum human GH levels, with a half-maximal effective dose of 0.4±0.1 mg/kg[1].

Solubility Information

Solubility	DMSO: 135 mg/mL (95.63 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 (7.08 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: < 10 mg/mL (7.08 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Corn Oil: 2.5 mg/mL (1.77 mM),Sonication is recommended. 10% DMSO+90% Corn oil: 10 mg/mL (7.08 mM),Solution. 10% DMSO+90% (20% SBE-β-CD in Saline): < 10 mg/mL (7.08 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *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*

In vivo Formulation	*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	0.7084 mL	3.542 mL	7.084 mL
5 mM	0.1417 mL	0.7084 mL	1.4168 mL
10 mM	0.0708 mL	0.3542 mL	0.7084 mL
50 mM	0.0142 mL	0.0708 mL	0.1417 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

Clackson T, et al. Redesigning an FKBP-ligand interface to generate chemical dimerizers with novel specificity. Proc Natl Acad Sci U S A. 1998 Sep 1;95(18):10437-42.
Thomis DC, et al. A Fas-based suicide switch in human T cells for the treatment of graft-versus-host disease. Blood. 2001 Mar 1;97(5):1249-57.