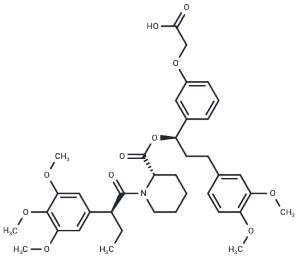
Data Sheet (Cat.No.T14297)

AP1867

Chemical Properties



CAS No. : 195514-23-9

Formula: C38H47NO11

Molecular Weight: 693.78

Storage: Keep away from direct sunlight,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	AP1867 (FK506-binding protein) is a synthetic FKBP12 F36V-directed ligand attached to 320 substituted tetrahydrooxazepines (THOXs). AP1867 (FK506-binding protein) was synthesized via combined liquid- and solid-phase methods employing sequential Mitsunobu displacements followed by ruthenium-mediated olefin metathesis to close seven-membered rings; the resin-bound THOX ligands were coupled to AP1867 in parallel, yielding candidate heterodimerizers that demonstrated membrane permeability and bioactivity in human fibrosarcoma cells, facilitating the study of targeted protein interactions and intracellular modulation.
Targets(IC50)	mTOR
In vitro	AP1867 binds to wild-type FKBP with a Kd value of 67 nM [2].

Solubility Information

Solubility	DMSO: 80 mg/mL (115.31 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: 3.3 mg/mL (4.76 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	1.4414 mL	7.2069 mL	14.4138 mL
5 mM	0.2883 mL	1.4414 mL	2.8828 mL
10 mM	0.1441 mL	0.7207 mL	1.4414 mL
50 mM	0.0288 mL	0.1441 mL	0.2883 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

Nabet B, et al. The dTAG system for immediate and target-specific protein degradation. Nat Chem Biol. 2018 May; 14(5):431-441.
Koide K, et al. A synthetic library of cell-permeable molecules. J Am Chem Soc. 2001 Jan 24;123(3):398-408.