

W146 TFA

Chemical Properties

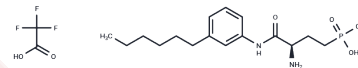
CAS No. : 909725-62-8

Formula: C₁₈H₂₈F₃N₂O₆P

Molecular Weight: 456.399

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	W146 TFA is a selective antagonist of the sphingosine-1-phosphate receptor 1 (S1PR1), exhibiting an EC ₅₀ value of 398 nM.
Targets(IC ₅₀)	Apoptosis,Others,LPL Receptor
In vitro	W146 is a S1PR1 antagonist with a K _i of ~70-80 nM [1]. W146 pretreatment significantly increases activated cleaved caspase-3 levels. The reduced apoptosis of EPCs induced by S1P is completely abolished after treatment with W146 [2]. Apoptosis Analysis [2] Cell Line: Endothelial progenitor cells (EPCs). Concentration: 10 μM. Incubation Time: 30 min before the addition of S1P. Result: Increases activated cleaved caspase-3 levels.
In vivo	Pre-treatment with W146 (5 mg/kg, intraperitoneally (ip), before AMD3100 administration) significantly enhances KSL-HSPC mobilization, showcasing an approximately 8-fold increase, as determined by CFU-G/M colony forming assays, in comparison with the effects observed in mice receiving only AMD3100. This effect of W146 on enhancing KSL-HSPC mobilization is notably specific; contrasting results are seen with W140 pretreatment, which does not influence AMD3100-induced KSL-HSPC mobilization. Notably, administrations of W146, W140, JTE013, or Cay10444 do not impact the basal white blood cell (WBC) count in mice. The experiments were conducted on 4-6-week-old mice, utilizing a dosage of 5 mg/kg administered via IP 1 hour before the AMD3100 (ADM) treatment, leading to a marked increase in KSL-HSPC mobilization compared to the control group treated with dextran followed by AMD3100.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1911 mL	10.9553 mL	21.9106 mL
5 mM	0.4382 mL	2.1911 mL	4.3821 mL
10 mM	0.2191 mL	1.0955 mL	2.1911 mL
50 mM	0.0438 mL	0.2191 mL	0.4382 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.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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