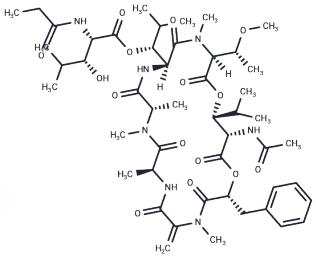
Data Sheet (Cat.No.T27387)

FR900359

Chemical Properties



CAS No. : 107530-18-7

Formula: C49H75N7O15

Molecular Weight: 1002.16

Storage: 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	FR900359, a non-ribosomal cyclic peptide derived from the soil bacterium Chromobacterium oxysporum, is a macrocyclic Gq protein inhibitor that inhibits melanoma cell proliferation and can be used in studies of asthma, inflammation, and cancer.
Targets(IC50)	Apoptosis,ERK
In vitro	FR900359 (0-10 μM; treated for 24 hours) effectively reduces the growth of B16 cells in a concentration-dependent manner, inhibiting cell proliferation and migration[1].
In vivo	In isometric force measurements in the mouse tail artery, FR900359 (1.0 μM; post-wash) significantly reduces vascular tone[1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.9978 mL	4.9892 mL	9.9784 mL
5 mM	0.1996 mL	0.9978 mL	1.9957 mL
10 mM	0.0998 mL	0.4989 mL	0.9978 mL
50 mM	0.020 mL	0.0998 mL	0.1996 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

Schrage R, et.al. The experimental power of FR900359 to study Gq-regulated biological processes. Nat Commun. 2015 Dec 14;6:10156.

Fujioka, M,et.al. Structure of FR900359, a cyclic depsipeptide from Ardisia crenata sims J. Org. Chem. 1988, 53 (12), 2820–2825.

Lapadula D, et.al. Effects of Oncogenic Gαq and Gα11 Inhibition by FR900359 in Uveal Melanoma. Mol Cancer Res. 2019 Apr;17(4):963-973.

Matthey M, et.al. Targeted inhibition of Gq signaling induces airway relaxation in mouse models of asthma. Sci Transl Med. 2017 Sep 13;9(407):eaag2288.