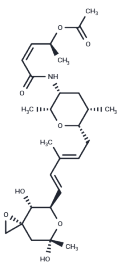
Data Sheet (Cat.No.T31866)

FR901464

Chemical Properties



CAS No. : 146478-72-0

Formula: C27H41NO8

Molecular Weight: 507.62

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	FR901464 (WB 2663B) is potent cytotoxic natural products that share an amine-containing tetrahydropyran ring.
Targets(IC50)	Others
In vitro	FR901464 (10-20 ng/ml; 6-24 hours) inhibited the growth of solid tumors, colon cancer, and methoxamine A fibrosarcoma in mice. FR901464 induced characteristic G1 and G2/M phase arrest in the cell cycle and internucleosomal degradation of genomic DNA in M-8 tumor cells by the same principle as SV40 promoter dependent cellular transcription. FR901464 (1-10 ng/ml) induced the transcription of some endogenous genes in M-8 cells, but did not inhibit the transcription of endogenous genes[1].

Solubility Information

Solubility	DMSO: 90 mg/mL (177.3 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 (6.5 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	1.970 mL	9.8499 mL	19.6998 mL
5 mM	0.394 mL	1.970 mL	3.940 mL
10 mM	0.197 mL	0.985 mL	1.970 mL
50 mM	0.0394 mL	0.197 mL	0.394 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

Satoh T, Kaida D. Upregulation of p27 cyclin-dependent kinase inhibitor and a C-terminus truncated form of p27 contributes to G1 phase arrest. Sci Rep. 2016 Jun 10;6:27829.
Pham D, et, al. Discoveries, target identifications, and biological applications of natural products that inhibit splicing factor 3B subunit 1. Nat Prod Rep. 2016 May 4;33(5):637-47.
He HY, et, al.An unusual dehydratase acting on glycerate and a ketoreducatse stereoselectively reducing α-ketone in polyketide starter unit biosynthesis. Angew Chem Int Ed Engl. 2014 Oct 13;53(42):11315-9. doi: 10.1002/anie.201406602. Epub 2014 Aug 27.
Ghosh AK, et, al. Enantioselective total syntheses of FR901464 and spliceostatin A and evaluation of splicing activity of key derivatives. J Org Chem. 2014 Jun 20;79(12):5697-709.