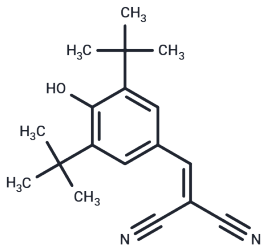
Data Sheet (Cat.No.T2479)

TargetMol

Tyrphostin A9

Chemical Properties



CAS No. : 10537-47-0

Formula: C18H22N2O

Molecular Weight: 282.38

Storage: Store under nitrogen
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Description	Tyrphostin A9 (SF 6847) is an Agricultural acaricide, now superseded. Tyrphostin A9 is firstly designed as an EGFR inhibitor
Targets(IC50)	EGFR,Influenza Virus,PDGFR,VEGFR
In vivo	SF 6847 prevents the PDGF-induced tyrosine phosphorylation of LGF in caveolae of human fibroblasts, suggesting that PDGF-BB-mediated activation of LRP requires tyrosine phosphorylation and thereby activates PDGFR-β. Additionally, SF 6847 inhibits the replication of Herpes Simplex Virus Type 1 (HSV-1) with an IC50 of 40 nM and enhances the inclusion of MAPT exon 10 in SHSY-5Y cells by twofold at a concentration of 1.6 μM. At 1 mM, it blocks the strain-induced stimulation of DNA synthesis in fetal lung cells. SF 6847 partially reverses vanadate-induced HSV-1 plaque formation at 50 nM and reduces viral phosphoprotein phosphorylation in a dose-dependent manner at concentrations below 400 nM. However, the reduction in protein synthesis induced by SF 6847 at concentrations below 800 nM is not dose-dependent.

Solubility Information

Solubility	DMSO: 250 mg/mL (885.33 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 (35.41 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% (20% SBE-β-CD in Saline): < 10 mg/mL (35.41 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: < 10 mg/mL (35.41 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+90% Corn oil: 10 mg/mL (35.41 mM),Solution. *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	3.5413 mL	17.7066 mL	35.4133 mL
5 mM	0.7083 mL	3.5413 mL	7.0827 mL
10 mM	0.3541 mL	1.7707 mL	3.5413 mL
50 mM	0.0708 mL	0.3541 mL	0.7083 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

Gazit A, et al. J Med Chem, 1989, 32(10), 2344-2352.
Nejatie A, Proceviat C, Gros C, et al.A self-immolative Kdn-glycoside substrate enables high-throughput screening for inhibitors of Kdnases.Glycobiology.2024: cwae094.
Yura Y, et al. Arch Virol, 1995, 140(7), 1181-1194.
Boucher P, et al. J Biol Chem, 2002, 277(18), 15507-15513.
Liu M, et al. Am J Physiol, 1995, 269(2 Pt 1), L178-184.
Stoilov P, et al. Proc Natl Acad Sci U S A, 2008, 105(32), 11218-11223.