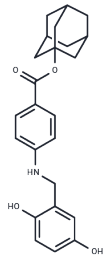
Data Sheet (Cat.No.T22553)

TargetMol

Adaphostin

Chemical Properties



CAS No. : 241127-58-2

Formula: C24H27NO4

Molecular Weight: 393.48

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	Adaphostin (NSC-680410) is a p210Bcr/Abl tyrosine kinase inhibitor with IC50 of 14 μM.
Targets(IC50)	Apoptosis,Bcr-Abl
In vitro	It also induces apoptosis in T-lymphoblastic human leukemia cell lines (IC50 values range from 16.8 to 216.3 nM) in vitro.
In vivo	Adaphostin can damage both myeloid and lymphoid leukemia cells[2].

Solubility Information

Solubility	Ethanol: < 40 mg/mL (101.66 mM),Sonication is recommended. DMSO: 55 mg/mL (139.78 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: 2 mg/mL (5.08 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	2.5414 mL	12.7071 mL	25.4143 mL
5 mM	0.5083 mL	2.5414 mL	5.0829 mL
10 mM	0.2541 mL	1.2707 mL	2.5414 mL
50 mM	0.0508 mL	0.2541 mL	0.5083 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

Svingen PA, et al. Effects of the bcr/abl kinase inhibitors AG957 and NSC 680410 on chronic myelogenous leukemia cells in vitro. Clin Cancer Res. 2000;6(1):237-249.
Chandra J, et al. Involvement of reactive oxygen species in adaphostin-induced cytotoxicity in human leukemia cells. Blood. 2003;102(13):4512-4519.
Orsolic N, et al. Adaphostin has significant and selective activity against chronic and acute myeloid leukemia cells. Cancer Sci. 2006;97(9):952-960.