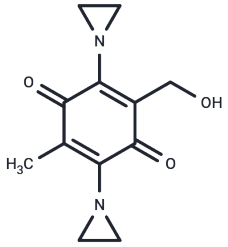
Data Sheet (Cat.No.T16740)

RH1

Chemical Properties



CAS No. : 221635-42-3

Formula: C12H14N2O3

Molecular Weight: 234.25

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	RH1 (NSC 697726) is a bioreductive anticancer compound that exhibits dose-dependent biphasic effects in vitro, inducing apoptosis at higher doses and senescence at lower doses.
Targets(IC50)	Apoptosis,Others
In vitro	RH1 causes apoptosis in NQ16 cells in a time- and concentration-dependent manner. Treatment of NQ16 cells with RH1 (50 and 100 nM) for 60 and 120 minutes resulted in a significant ($p< 0.05$) increase in cross-linked DNA [1].
In vivo	RH1 exhibited dose-dependent antitumor activity against NQ16 tumors grown in thymus-free mice. A small dose of RH1 (0.1 mg/kg) also resulted in a significant reduction in tumor size in treated mice compared to controls. Treatment of mice with NQ16 tumors with RH1 (0.4 mg/kg and 0.2 mg/kg) resulted in a significant reduction in tumor size between the treated and control groups as early as 5 days after the end of the treatment period [2].

Solubility Information

Solubility	DMSO: 1 mg/mL (4.27 mM),Sonication and heating are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	4.2689 mL	21.3447 mL	42.6894 mL
5 mM	0.8538 mL	4.2689 mL	8.5379 mL
10 mM	0.4269 mL	2.1345 mL	4.2689 mL
50 mM	0.0854 mL	0.4269 mL	0.8538 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

Park MT, et al. The anti-tumour compound, RH1, causes mitochondria-mediated apoptosis by activating c-Jun N-terminal kinase. Br J Pharmacol. 2011 Jun;163(3):567-85.
Dehn DL, et al. Development of a new isogenic cell-xenograft system for evaluation of NAD(P)H:quinone oxidoreductase-directed antitumor quinones: evaluation of the activity of RH1. Clin Cancer Res. 2004 May 1;10(9):3147-55.