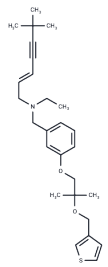
Data Sheet (Cat.No.T11321)

TargetMol

FR194738 free base

Chemical Properties



CAS No. : 204067-45-8

Formula: C27H37NO2S

Molecular Weight: 439.65

Storage: Pure form: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	FR194738 free base inhibits squalene epoxidase activity in HepG2 cell homogenates with an IC50 of 9.8 nM.
Targets(IC50)	Others,Antifungal
In vitro	FR194738 free base potently inhibits squalene epoxidase in HepG2 cell homogenate and liver microsomes in dogs and rats. FR194738 free base inhibits hamster liver microsomal squalene epoxidase activity in a concentration-dependent manner with an IC50 of 14 nM[2]. In intact HepG2 cells, FR194738 free base inhibits the incorporation of [14C] acetate into free cholesterol and cholesteryl ester in a concentration-dependent manner (IC50s = 4.9 and 8.0 nM). FR194738 free base induces intracellular [14C]squalene accumulation and increases the incorporation of [14C]acetate into squalene[3].
In vivo	FR194738 free base reduces the serum levels of total, non high density lipoprotein and high density lipoprotein cholesterol, and triglyceride. In hamsters, FR194738 free base (32 mg/kg) increases HMG-CoA reductase activity by 1.3-fold[2].

Solubility Information

Solubility	DMSO: 90 mg/mL (204.71 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 (7.51 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	2.2745 mL	11.3727 mL	22.7454 mL
5 mM	0.4549 mL	2.2745 mL	4.5491 mL
10 mM	0.2275 mL	1.1373 mL	2.2745 mL
50 mM	0.0455 mL	0.2275 mL	0.4549 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

Sawada M, et al. Effect of FR194738, a potent inhibitor of squalene epoxidase, on cholesterol metabolism in HepG2 cells. Eur J Pharmacol. 2001 Nov 9;431(1):11-6.
Sawada M, et al. Synthesis and biological activity of a novel squalene epoxidase inhibitor, FR194738. Bioorg Med Chem Lett. 2004 Feb 9;14(3):633-7.
Sawada M, et al. Inhibition of cholesterol synthesis causes both hypercholesterolemia and hypocholesterolemia in hamsters. Biol Pharm Bull. 2002 Dec;25(12):1577-82.