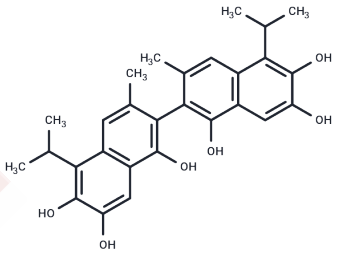
Data Sheet (Cat.No.T13459)

TargetMol

(+)-Apogossypol

Chemical Properties



CAS No. : 66389-74-0

Formula: C28H30O6

Molecular Weight: 462.53

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	(+)-Apogossypol is an antagonist of pan-BCL-2. (+)-Apogossypol binds to Mcl-1(Bcl-2 and Bcl-xL with EC50s of 2.6, 2.8 and 3.69 μM, respectively).
Targets(IC50)	Bcl-2 Family,Others
In vitro	Consistent with NMR binding and fluorescence polarization assay (FPAs) data, (+)-Apogossypol showed an effective binding affinity for Bcl-xL (Kd: 1.7 μM) [1].To investigate the inhibitory effects of (+)-Apogossypol and Gossypol on LNCaP cell survival, the MTT assay is performed. (+)-Apogossypol inhibits the proliferation of LNCaP cells in a time- and dose-dependent manner, in a similar way with Gossypol. The concentration for 50% inhibition (IC50) on LNCaP cells within ~72 h is 9.57 μM, while the IC50 of Gossypol on LNCaP cells is 10.35 μM[2].
In vivo	The anti-cancer effect of (+)-Apogossypol is evaluated in mice bearing subcutaneous LNCaP cell xenografts. The tumor growth is monitored and measured by a caliper and balance. The survival rate of the mice is notably improved by (+)-Apogossypol. Of note, the tumor sizes are also markedly decreased by (+)-Apogossypol treatment (P<0.01)[2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.162 mL	10.8101 mL	21.6202 mL
5 mM	0.4324 mL	2.162 mL	4.324 mL
10 mM	0.2162 mL	1.081 mL	2.162 mL
50 mM	0.0432 mL	0.2162 mL	0.4324 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

Wei J, et al. Apogossypol derivatives as antagonists of antiapoptotic Bcl-2 family proteins. Mol Cancer Ther. 2009 Apr;8(4):904-13.

Zhan W, et al. Inhibitory activity of apogossypol in human prostate cancer in vitro and in vivo. Mol Med Rep. 2015 Jun;11(6):4142-8.