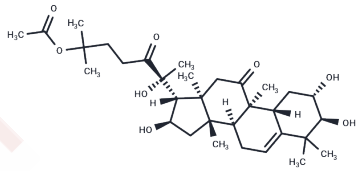
Data Sheet (Cat.No.T3S1471)

TargetMol

Cucurbitacin IIA

Chemical Properties



CAS No. : 58546-34-2

Formula: C32H50O8

Molecular Weight: 562.73

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	1. Cucurbitacin IIA (Dihydrocucurbitacin Q1) can induce apoptosis and enhance autophagy , contributes to the anti-inflammatory activity of Cucurbitacin IIA against inflammation-related diseases. 2. Cucurbitacin IIA is a novel class of anti-cancer drug in suppression of cancer cell expansion by disrupting the actin cytoskeleton and directing the cell to undergo PARP-mediated apoptosis through the inhibition of survivin downstream of JAK2/STAT3.
Targets(IC50)	Apoptosis,Survivin

Solubility Information

Solubility	DMSO: 125 mg/mL (222.13 mM),Sonication is recommended. Chloroform, Dichloromethane, Ethyl Acetate, Acetone, etc.: Soluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Saline: < 10 mg/mL (17.77 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. 10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (17.77 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	1.7771 mL	8.8853 mL	17.7705 mL
5 mM	0.3554 mL	1.7771 mL	3.5541 mL
10 mM	0.1777 mL	0.8885 mL	1.7771 mL
50 mM	0.0355 mL	0.1777 mL	0.3554 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

He J , Wang Y , Xu L H , et al. Cucurbitacin IIa induces caspase-3-dependent apoptosis and enhances autophagy in lipopolysaccharide-stimulated RAW 264.7 macrophages[J]. International Immunopharmacology, 2013, 16(1):27-34.