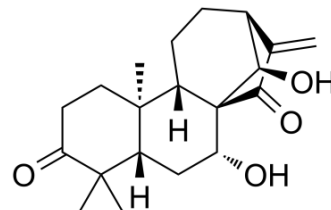


Glaucocalyxin A

Cat. No.:	HY-N2112		
CAS No.:	79498-31-0		
Molecular Formula:	C ₂₀ H ₂₈ O ₄		
Molecular Weight:	332.43		
Target:	PI3K; Akt; Apoptosis		
Pathway:	PI3K/Akt/mTOR; Apoptosis		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (300.82 mM; Need ultrasonic)																													
	Preparing Stock Solutions	<table border="1"> <thead> <tr> <th>Solvent</th> <th>Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>Concentration</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1 mM</td> <td></td> <td>3.0082 mL</td> <td>15.0408 mL</td> <td>30.0815 mL</td> </tr> <tr> <td>5 mM</td> <td></td> <td>0.6016 mL</td> <td>3.0082 mL</td> <td>6.0163 mL</td> </tr> <tr> <td>10 mM</td> <td></td> <td>0.3008 mL</td> <td>1.5041 mL</td> <td>3.0082 mL</td> </tr> </tbody> </table>	Solvent	Mass	1 mg	5 mg	10 mg	Concentration					1 mM		3.0082 mL	15.0408 mL	30.0815 mL	5 mM		0.6016 mL	3.0082 mL	6.0163 mL	10 mM		0.3008 mL	1.5041 mL	3.0082 mL			
		Solvent	Mass	1 mg	5 mg	10 mg																								
		Concentration																												
		1 mM		3.0082 mL	15.0408 mL	30.0815 mL																								
5 mM		0.6016 mL	3.0082 mL	6.0163 mL																										
10 mM		0.3008 mL	1.5041 mL	3.0082 mL																										
Please refer to the solubility information to select the appropriate solvent.																														
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (7.52 mM); Clear solution																													
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (7.52 mM); Clear solution																													
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.52 mM); Clear solution																													

BIOLOGICAL ACTIVITY

Description	Glaucocalyxin A, an ent-kauranoid diterpene from <i>Rabdosia japonica</i> var., induces apoptosis in osteosarcoma by inhibiting nuclear translocation of Five-zinc finger Glis 1 (GLI1) via regulating PI3K/Akt signaling pathway. Glaucocalyxin A has antitumor effect ^[1] .		
IC ₅₀ & Target	PI3K	Akt	
In Vitro	Glaucocalyxin A induces apoptosis by mitochondrial apoptotic pathway through several steps including increasing the Bax/Bcl-2 ratio, triggering the intracellular reactive oxygen species (ROS) generation, reducing mitochondrial membrane		

potential (MMP), and inducing cleavage of caspase-9 and caspase-3^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Zhu J, et al. Glaucoalyxin A exerts anticancer effect on osteosarcoma by inhibiting GLI1 nucleartranslocation via regulating PI3K/Akt pathway. Cell Death Dis. 2018 Jun 13;9(6):708.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA