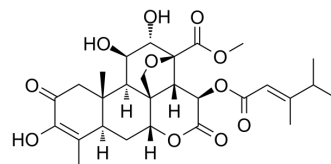


Bruceantin

Cat. No.:	HY-N0840		
CAS No.:	41451-75-6		
Molecular Formula:	C ₂₈ H ₃₆ O ₁₁		
Molecular Weight:	548.58		
Target:	Others		
Pathway:	Others		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (182.29 mM; Need ultrasonic)

Concentration	Solvent	Mass	1 mg			5 mg			10 mg		
			Concentration			Concentration			Concentration		
Preparing Stock Solutions	1 mM		1.8229 mL			9.1144 mL			18.2289 mL		
	5 mM		0.3646 mL			1.8229 mL			3.6458 mL		
	10 mM		0.1823 mL			0.9114 mL			1.8229 mL		

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 2.5 mg/mL (4.56 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 2.5 mg/mL (4.56 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 2.5 mg/mL (4.56 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Bruceantin(NSC165563) is first isolated from *Brucea javanica*, a tree used in Ethiopia for the treatment of cancer, and activity was observed against B16 melanoma, colon 38, and L1210 and P388 leukemia in mice. IC50 value: Target: anticancer Cell differentiation was induced and c-MYC was down-regulated, suggesting a mechanistic correlation between c-MYC down-regulation and induction of cell differentiation or cell death. Treatment of HL-60 and RPMI 8226 cell lines induced apoptosis, and this involved the caspase and mitochondrial pathways. Moreover, an in vivo study using RPMI 8226 human-SCID xenografts demonstrated that bruceantin induced regression in early as well as advanced tumors, and these significant antitumor responses were facilitated in the absence of overt toxicity.

REFERENCES

- [1]. Cuendet M, et al. Multiple myeloma regression mediated by bruceantin. Clin Cancer Res. 2004 Feb 1;10(3):1170-9.
- [2]. Cuendet M, et al. Antitumor activity of bruceantin: an old drug with new promise. J Nat Prod. 2004 Feb;67(2):269-72.
-

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