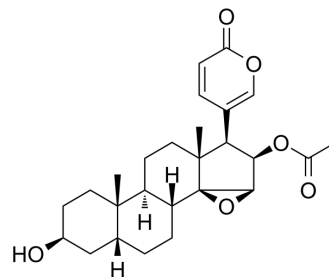


Cinobufagin

Cat. No.:	HY-N0421		
CAS No.:	470-37-1		
Molecular Formula:	C ₂₆ H ₃₄ O ₆		
Molecular Weight:	442.54		
Target:	Autophagy; Apoptosis		
Pathway:	Autophagy; Apoptosis		
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 (225.97 mM)
 * "≥" means soluble, but saturation unknown.

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.2597 mL	11.2984 mL	22.5968 mL
	5 mM	0.4519 mL	2.2597 mL	4.5194 mL
	10 mM	0.2260 mL	1.1298 mL	2.2597 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 (5.65 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
 Solubility: ≥ 2.5 mg/mL (5.65 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
 Solubility: ≥ 2.5 mg/mL (5.65 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Cinobufagin, a kind of Chinese materia medica with antitumor effect, is widely used in clinical practice, especially in anti-liver cancer. IC₅₀ value: Target: In vitro: Cinobufagin inhibited proliferation of cancer cells at doses of 0.1, 1, or 10 μM after 2–4 days of culture. Cytotoxicity of cinobufagin on the DU145 and LNCaP cells was dose-dependent. Cinobufagin increased [Ca²⁺]_i and apoptosis in cancer cells after a 24-hr culture as well as caspase 3 activities in DU145 and PC3 cells and caspase 9 activities in LNCaP cells [1]. Cinobufagin suppresses cell proliferation and causes apoptosis in prostate cancer cells via a sequence of apoptotic modulators, including Bax, cytochrome c and caspases [2]. In vivo:

CUSTOMER VALIDATION

- Exp Cell Res. 2020 Aug 1;393(1):112054.

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

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