**Proteins** 

# **Screening Libraries**

# **Product** Data Sheet

# **Proscillaridin A**

Cat. No.: HY-N2331 CAS No.: 466-06-8 Molecular Formula: C<sub>30</sub>H<sub>42</sub>O<sub>8</sub> Molecular Weight: 530.65

Target: Topoisomerase

Pathway: Cell Cycle/DNA Damage

Storage: Powder -20°C 3 years

2 years

In solvent -80°C 6 months

> -20°C 1 month

### **SOLVENT & SOLUBILITY**

In Vitro

DMSO: 100 mg/mL (188.45 mM; Need ultrasonic)

	Solvent Mass Concentration	1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.8845 mL	9.4224 mL	18.8448 mL
ocock octations	5 mM	0.3769 mL	1.8845 mL	3.7690 mL
	10 mM	0.1884 mL	0.9422 mL	1.8845 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 (4.71 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- $\beta$ -CD in saline) Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.71 mM); Clear solution

## **BIOLOGICAL ACTIVITY**

Description	Proscillaridin A is a potent po	ison of topoisomerase I/II activity with $IC_{50}$ values of 30 nM and 100 nM, respectively <sup>[1]</sup> .
IC <sub>50</sub> & Target	Topoisomerase I 30 nM (IC <sub>50</sub> )	Topoisomerase II 100 nM (IC <sub>50</sub> )
In Vitro	Proscillaridin A (0-160 nM; 48 MCF-7 cells <sup>[1]</sup> .	hours) reveals the antiproliferative response in a time- as well as dose-dependent manner in

REFERENCES		
1]. Bielawski K, et al. Inhibitio 006 Jul;29(7):1493-7.	on of DNA topoisomerases I and II, and growth inhibition of breast cancer MCF-7 cells by ouabain, digoxin and proscillaridi	n A.Biol Pharm Bul
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MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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