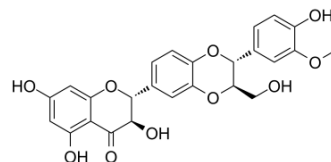


## Isosilybin A

<b>Cat. No.:</b>	HY-N7043		
<b>CAS No.:</b>	142796-21-2		
<b>Molecular Formula:</b>	C <sub>25</sub> H <sub>22</sub> O <sub>10</sub>		
<b>Molecular Weight:</b>	482.44		
<b>Target:</b>	Apoptosis		
<b>Pathway:</b>	Apoptosis		
<b>Storage:</b>	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 (207.28 mM; Need ultrasonic)

Concentration	Solvent	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	2.0728 mL	10.3640 mL	20.7280 mL
	5 mM	0.4146 mL	2.0728 mL	4.1456 mL
	10 mM	0.2073 mL	1.0364 mL	2.0728 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 (5.18 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: ≥ 2.5 mg/mL (5.18 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: ≥ 2.5 mg/mL (5.18 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Isosilybin A, a flavonolignan isolated from silymarin, has anti-prostate cancer (PCA) activity. Isosilybin A inhibits proliferation and induces G1 phase arrest and apoptosis in cancer cells, which activates apoptotic machinery in PCA cells via targeting Akt-NF-κB-androgen receptor (AR) axis<sup>[1][2]</sup>.

### REFERENCES

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[1]. Deep G, et al. Isosilybin B and isosilybin A inhibit growth, induce G1 arrest and cause apoptosis in human prostatecancer LNCaP and 22Rv1 cells. Carcinogenesis. 2007 Jul;28(7):1533-42.

[2]. Deep G, et al. Isosilybin A induces apoptosis in human prostate cancer cells via targeting Akt, NF- $\kappa$ B, and androgen receptor signaling. Mol Carcinog. 2010 Oct;49(10):902-12.

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

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