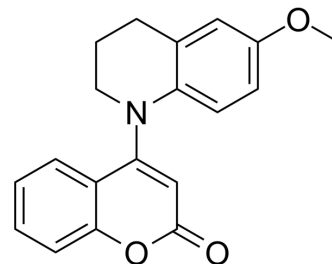


## MY-1442

<b>Cat. No.:</b>	HY-162089		
<b>Molecular Formula:</b>	C <sub>19</sub> H <sub>17</sub> NO <sub>3</sub>		
<b>Molecular Weight:</b>	307.34		
<b>Target:</b>	Microtubule/Tubulin; Apoptosis		
<b>Pathway:</b>	Cell Cycle/DNA Damage; Cytoskeleton; 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 (325.37 mM; ultrasonic and warming and heat to 80°C)

Concentration	Mass			
	1 mg	5 mg	10 mg	
1 mM	3.2537 mL	16.2686 mL	32.5373 mL	
5 mM	0.6507 mL	3.2537 mL	6.5075 mL	
10 mM	0.3254 mL	1.6269 mL	3.2537 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: 5 mg/mL (16.27 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
Solubility: 5 mg/mL (16.27 mM); Clear solution; Need ultrasonic
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
Solubility: 5 mg/mL (16.27 mM); Clear solution; Need ultrasonic

### BIOLOGICAL ACTIVITY

#### Description

MY-1442 (I-3) is a microtubulin polymerization inhibitor. MY-875 inhibits tubulin polymerization by targeting colchicine binding sites. MY-1442 has anticancer activity. MY-1442 can induce apoptosis of MGC-803 cells and inhibit cell migration<sup>[1]</sup>.

### REFERENCES

- [1]. Tian XY, et al. Discovery of novel coumarin-based derivatives as inhibitors of tubulin polymerization targeting the colchicine binding site with potent anti-gastric cancer activities. Eur J Med Chem. 2023 Dec 22;265:116079.

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

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