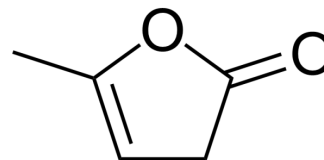


α -Angelica lactone

Cat. No.:	HY-N0548
CAS No.:	591-12-8
Molecular Formula:	C ₅ H ₆ O ₂
Molecular Weight:	98.1
Target:	Glutathione S-transferase
Pathway:	Metabolic Enzyme/Protease
Storage:	4°C, sealed storage, away from moisture * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (1019.37 mM; Need ultrasonic)																													
	Preparing Stock Solutions	<table border="1"> <thead> <tr> <th>Solvent</th> <th>Mass</th> <th>1 mg</th> <th>5 mg</th> <th>10 mg</th> </tr> </thead> <tbody> <tr> <td>Concentration</td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>1 mM</td> <td></td> <td>10.1937 mL</td> <td>50.9684 mL</td> <td>101.9368 mL</td> </tr> <tr> <td>5 mM</td> <td></td> <td>2.0387 mL</td> <td>10.1937 mL</td> <td>20.3874 mL</td> </tr> <tr> <td>10 mM</td> <td></td> <td>1.0194 mL</td> <td>5.0968 mL</td> <td>10.1937 mL</td> </tr> </tbody> </table>	Solvent	Mass	1 mg	5 mg	10 mg	Concentration					1 mM		10.1937 mL	50.9684 mL	101.9368 mL	5 mM		2.0387 mL	10.1937 mL	20.3874 mL	10 mM		1.0194 mL	5.0968 mL	10.1937 mL			
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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: \geq 2.5 mg/mL (25.48 mM); Clear solution																													
	2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE- β -CD in saline) Solubility: \geq 2.5 mg/mL (25.48 mM); Clear solution																													
	3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: \geq 2.5 mg/mL (25.48 mM); Clear solution																													

BIOLOGICAL ACTIVITY

Description	α -Angelica lactone is a naturally occurring anticarcinogen and an vinylogous nucleophile. α -Angelica lactone can give the chiral δ -amino γ,γ -disubstituted butenolide carbonyl derivatives and exhibit electrophilic trapping at the γ -carbon. α -Angelica lactone exerts strong chemoprotective effects by selective enhancement of glutathione-S-transferase (GST) and UDP-gluconosyltransferase (UGT) detoxification enzymes ^{[1][2][3][4]} .
IC ₅₀ & Target	Glutathione-S-transferase (GST) detoxification enzyme ^{[1][2]} UDP-gluconosyltransferase (UGT) detoxification enzyme ^[2]

CUSTOMER VALIDATION

- Nat Commun. 2023 Sep 26;14(1):5984.
- Research Square Print. 2022 May.

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REFERENCES

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- [3]. Lin Zhou, et al. Catalytic Asymmetric Vinylogous Mannich-type (AVM) Reaction of Nonactivated α -Angelica Lactone. Org Lett. 2011 Jun 17;13(12):3056-9.
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Caution: Product has not been fully validated for medical applications. For research use only.

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