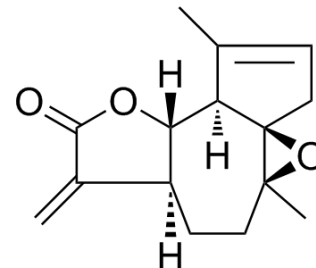


## Arglabin

<b>Cat. No.:</b>	HY-16059		
<b>CAS No.:</b>	84692-91-1		
<b>Molecular Formula:</b>	C <sub>15</sub> H <sub>18</sub> O <sub>3</sub>		
<b>Molecular Weight:</b>	246.3		
<b>Target:</b>	NOD-like Receptor (NLR); Farnesyl Transferase; Autophagy		
<b>Pathway:</b>	Immunology/Inflammation; Metabolic Enzyme/Protease; Autophagy		
<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 (406.01 mM)  
 \* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
	1 mM	4.0601 mL	20.3004 mL	40.6009 mL
	5 mM	0.8120 mL	4.0601 mL	8.1202 mL
	10 mM	0.4060 mL	2.0300 mL	4.0601 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 (10.15 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
 Solubility: ≥ 2.5 mg/mL (10.15 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil  
 Solubility: ≥ 2.5 mg/mL (10.15 mM); Clear solution

### BIOLOGICAL ACTIVITY

#### Description

Arglabin ((+)-Arglabin), a natural product isolated from *Artemisia glabella*, is a NLRP3 inflammasome inhibitor. Arglabin shows anti-inflammatory and antitumor activities<sup>[1]</sup>. The antitumor activity of Arglabin proceeds through its inhibition of farnesyl transferase which leads to the activation of RAS proto-oncogene<sup>[2]</sup>.

#### In Vitro

The antitumor activity of arglabin proceeds through its inhibition of farnesyl transferase which leads to the activation of RAS proto-oncogene, a process that is believed to play a pivotal role in 20-30% of all human tumors. It actually inhibits the

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	incorporation of farnesyl pyrophosphate into human H-ras proteins by the enzyme farnesyl transferase (FTase) <sup>[2]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.
<b>In Vivo</b>	Arglabin reduces inflammation and plasma lipids, increases autophagy, and orients tissue macrophages into an anti-inflammatory phenotype in ApoE2.Ki mice fed a high-fat diet <sup>[1]</sup> . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

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## REFERENCES

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[1]. Abderrazak A, et al. Anti-inflammatory and antiatherogenic effects of the NLRP3 inflammasome inhibitor arglabin in ApoE2.Ki mice fed a high-fat diet. *Circulation*. 2015;131(12):1061-1070.

[2]. Lone SH, et al. Arglabin: From isolation to antitumor evaluation. *Chem Biol Interact*. 2015;240:180-198.

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

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