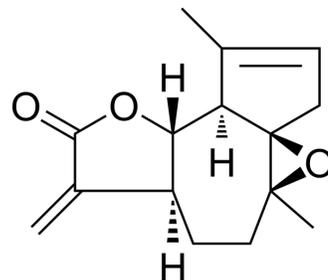


Arglabin

Cat. No.:	HY-16059
CAS No.:	84692-91-1
Molecular Formula:	C ₁₅ H ₁₈ O ₃
Molecular Weight:	246.3
Target:	NOD-like Receptor (NLR); Farnesyl Transferase; Autophagy
Pathway:	Immunology/Inflammation; Metabolic Enzyme/Protease; Autophagy
Storage:	Powder -20°C 3 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.

Concentration	Solvent	Mass	1 mg	5 mg	10 mg
			Concentration	1 mg	5 mg
Preparing Stock Solutions	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^[1]. The antitumor activity of Arglabin proceeds through its inhibition of farnesyl transferase which leads to the activation of RAS proto-oncogene^[2].

IC₅₀ & Target

NLRP3

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 incorporation of farnesyl pyrophosphate into human H-ras proteins by the enzyme farnesyl transferase (FTase)^[2].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

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^[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

- [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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