Arglabin

Cat. No.: HY-16059
CAS No.: 84692-91-1
Molecular Formula: C₁₅H₁₈O₃
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.

<table>
<thead>
<tr>
<th>Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>4.0601 mL</td>
<td>20.3004 mL</td>
<td>40.6009 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.8120 mL</td>
<td>4.0601 mL</td>
<td>8.1202 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.4060 mL</td>
<td>2.0300 mL</td>
<td>4.0601 mL</td>
</tr>
</tbody>
</table>

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: ≥ 2.5 mg/mL (10.15 mM); Clear solution
2. 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
3. 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. Arglabin shows anti-inflammatory and antitumor activities. The antitumor activity of Arglabin proceeds through its inhibition of farnesyl transferase which leads to the activation of RAS proto-oncogene.

**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). 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. MCE has not independently confirmed the accuracy of these methods. They are for reference only. |

**REFERENCES**


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

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