Jervine

Cat. No.: HY-N0836
CAS No.: 469-59-0
Molecular Formula: C₂₇H₃₉NO₃
Molecular Weight: 425.6
Target: Hedgehog; Smo
Pathway: Stem Cell/Wnt
Storage:
- Powder: -20°C for 3 years, 4°C for 2 years, In solvent: -80°C for 6 months, -20°C for 1 month

SOLVENT & SOLUBILITY

In Vitro DMSO: 1 mg/mL (2.35 mM; Need ultrasonic)

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>Mass (at 1 mg)</th>
<th>Mass (at 5 mg)</th>
<th>Mass (at 10 mg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>2.3496 mL</td>
<td>11.7481 mL</td>
<td>23.4962 mL</td>
</tr>
<tr>
<td>5 mM</td>
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<tr>
<td>10 mM</td>
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Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description

Jervine (11-Ketocyclopamine) is a potent Hedgehog (Hh) inhibitor with an IC₅₀ of 500-700 nM[1]. Jervine is a natural teratogenic steroidal alkaloid from rhizomes of Veratrum album. Jervine has anti-inflammatory and antioxidant properties [2].

IC₅₀ & Target

IC₅₀: 500-700 nM (Hedgehog)[1]

In Vitro

Jervine (40 μM; 6, 12 and 24 hours) inhibits Akt phosphorylation[3]. Jervine (40 μM; 2 hours) inhibits NF-jB activation decreased COX-2 overexpression and induced apoptosis[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line: HEL and TF1a cells
Concentration: 40 μM
Incubation Time: 6, 12 and 24 hours
Result: Inhibited Akt phosphorylation.

In Vivo
Jervine (orally; 50-400 mg/kg) exerts 50.4-73.5% anti-inflammatory effects in carrageenan induced paw edema\(^2\).

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

Animal Model: Male Sprague Dawley rats (180-200 g)\(^2\)
Dosage: 50, 100, 200 and 400 mg/kg
Administration: Orally
Result: Exerted 50.4-73.5% anti-inflammatory effects in carrageenan induced paw edema.

CUSTOMER VALIDATION

- Biochem Biophys Res Commun. 2020 Sep 21;S0006-291X(20)31574-6.

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REFERENCES


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

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