Piperazine adipate

Cat. No.: HY-B2186
CAS No.: 142-88-1
Molecular Formula: C₁₀H₂₀N₂O₄
Molecular Weight: 232.28
Target: Parasite
Pathway: Anti-infection
Storage:
- Powder: -20°C 3 years, 4°C 2 years
- In solvent: -80°C 6 months, -20°C 1 month

SOLVENT & SOLUBILITY

In Vitro

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass (mg/mL)</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₂O</td>
<td>14.29 mg/mL (61.52 mM; Need ultrasonic)</td>
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<tr>
<td>DMSO</td>
<td>&lt; 1 mg/mL (insoluble or slightly soluble)</td>
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</tbody>
</table>

Preparing Stock Solutions

- 1 mM: 4.3051 mL, 21.5257 mL, 43.0515 mL
- 5 mM: 0.8610 mL, 4.3051 mL, 8.6103 mL
- 10 mM: 0.4305 mL, 2.1526 mL, 4.3051 mL

Please refer to the solubility information to select the appropriate solvent.

BIOLOGICAL ACTIVITY

Description
Piperazine adipate is a potent broad spectrum anthelmintic against many common worm infections in mammals.

In Vitro
Piperazine adipate (10 mM) causes mortality of A. galli and H. gallinae after a maximum of 30 min exposure, inhibits malate oxidation by 78%, and inhibits aldolase activity in both parasites. Piperazine adipate (10 mM) also inhibits cholinesterase activity by 96% in Ascaridia galli (A. galli) and 93% in Heterakis gallinae (H. gallinae). Piperazine adipate inhibits oxaloacetate reduction by 26% and 55% in A. galli and H. gallinae, respectively[1].

REFERENCES