Naphthoquine phosphate

Cat. No.: HY-17036
CAS No.: 173531-58-3
Molecular Formula: C₂₄H₃₄ClN₃O₉P₂
Molecular Weight: 605.94
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
H₂O : 3.33 mg/mL (5.50 mM; Need ultrasonic)
DMSO : < 1 mg/mL (insoluble or slightly soluble)

Preparing Stock Solutions

<table>
<thead>
<tr>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>1.6503 mL</td>
<td>8.2516 mL</td>
<td>16.5033 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.3301 mL</td>
<td>1.6503 mL</td>
<td>3.3007 mL</td>
</tr>
<tr>
<td>10 mM</td>
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</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
Naphthoquine phosphate is antimalarial drug. IC50 Value: N/A
Target: Antiparasitic
Naphthoquine phosphate and artemisinine are two antimalarials developed in China. Both drugs have proven to be efficacious and well tolerated as monotherapy as well as in combination in patients suffering from malaria. The Co-naphthoquine, a novel antimalarial combination, is an oral fixed combination tablet of the naphthoquine phosphate and artemisinine. Artemisinin is characterised by a rapid onset of schizonticidal action and a short half-life. Parasite clearance is, however, often incomplete when it is employed as a single agent unless high dosages are used over several days, but such a regimen may reduce patient compliance and increase the danger of toxicity. Naphthoquine phosphate, by contrast, has a slower onset of action and a longer half-life, associated with a low recrudescence rate.

REFERENCES


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

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