Caspofungin Acetate

Cat. No.: B2083  
CAS No.: 179463-17-3  
Formula: C₅₆H₉₆N₁₀O₁₉  
M.Wt: 1213.42  

Synonyms:  
Target: Others  
Pathway: β(1,3)-D-Glucan Synthase  
Storage: Store at -20°C

Solvent & Solubility

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass Concentration</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td>Solvent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DMSO</td>
<td>0.8241 mL</td>
<td>4.1206 mL</td>
<td>8.2412 mL</td>
<td></td>
</tr>
<tr>
<td>EtOH</td>
<td>0.1648 mL</td>
<td>0.8241 mL</td>
<td>1.6482 mL</td>
<td></td>
</tr>
<tr>
<td>H₂O</td>
<td>0.0824 mL</td>
<td>0.4121 mL</td>
<td>0.8241 mL</td>
<td></td>
</tr>
</tbody>
</table>

≥60.67 mg/mL in DMSO; insoluble in EtOH; ≥21.5 mg/mL in H₂O

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

Biological Activity

Shortsummary: lipopeptide antifungal drug

IC₅₀ & Target:  
Cell Viability Assay

Cell Line: Aspergillus fumigates  
Preparation method: The solubility of this compound in DMSO is >10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37°C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.  
Reacting conditions: 32 μg/ml for 6 h; or 2 μg/ml for 12 h
Applications: Caspofungin suppressed the synthesis of cell wall β-1,3-glucan, which triggered a compensatory stimulation of chitin synthesis. Caspofungin induced morphological changes in Aspergillus fumigates. Moreover, Treatment with caspofungin induced ChsG-dependent upregulation of chitin synthesis and the formation of chitin-rich microcolonies in Aspergillus fumigates.

In Vivo

Animal experiment

Applications:

Product Citations


References


Caution

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NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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