Hexa-D-arginine

Cat. No.: HY-P1028
CAS No.: 673202-67-0
Molecular Formula: C₃₆H₇₅N₂₅O₆
Molecular Weight: 954.14
Sequence: Arg-Arg-Arg-Arg-Arg-Arg-NH₂
Sequence Shortening: RRRRRR-NH₂
Target: Others
Pathway: Others
Storage: Powder
-80°C 2 years
-20°C 1 year
In solvent
-80°C 6 months
-20°C 1 month

SOLVENT & SOLUBILITY

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>H₂O</td>
<td>1.0481 mL</td>
<td>5.2403 mL</td>
<td>10.4806 mL</td>
</tr>
<tr>
<td>DMSO</td>
<td>0.2096 mL</td>
<td>1.0481 mL</td>
<td>2.0961 mL</td>
</tr>
<tr>
<td></td>
<td>0.1048 mL</td>
<td>0.5240 mL</td>
<td>1.0481 mL</td>
</tr>
</tbody>
</table>

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

BIOLOGICAL ACTIVITY

Description
Hexa-D-arginine (Furin Inhibitor II) is a stable furin inhibitor with Kᵢ values 106 nM, 580 nM and 13.2 μM for furin, PACE4 and prohormone convertase-1 (PC1), respectively. Hexa-D-arginine blocks Pseudomonas exotoxin A and anthrax toxins toxicity in vitro and in vivo[1][2][3].

IC₅₀ & Target
Ki: 106 nM (Furin), 580 nM (PACE4) and 13.2 μM (PC1)[3]

In Vitro
Hexa-D-arginine effectively blocks Pseudomonas aeruginosa exotoxin A (PEA)-induced cell lysis and is itself noncytotoxic[1].

In Vivo
Administration of Hexa-D-arginine (0.1, 1, or 10 nM) to Pseudomonas aeruginosa exotoxin A (PEA)-treated mice (6-
week-old FVB and 129/Sv mice) significantly improves their survival rate and also decreases circulating levels of TNF-α\(^1\).

**REFERENCES**


