Cyclosporin A
Calcineurin Inhibitor
Catalog code: tlrl-cyca
https://www.invivogen.com/cyclosporin-a

For research use only
Version 19E23-MM

PRODUCT INFORMATION

Contents
• 100 mg Cyclosporin A

Storage and stability
- Cyclosporin A is provided as a solid and shipped at room temperature. Store at -20°C. Solid product is stable 1 year at -20°C when properly stored.
- Upon resuspension, Cyclosporin A should be aliquoted and stored at -20°C. Protect from light. Avoid repeated freeze-thaw cycles. Resuspended product is stable 3 months at -20°C when properly stored.

Quality control
- The absence of bacterial contamination (e.g. lipoproteins and endotoxins) has been confirmed using HEK-Blue™ TLR2 and HEK-Blue™ TLR4 cells.

DESCRIPTION

Cyclosporin A is a calcineurin inhibitor that exerts its immunosuppressive effects through the down-regulation of NFAT (nuclear factor of activated T cells) transcription factor, thus preventing the transcription of T cell effector cytokines. Moreover, NFAT has been implicated in the downstream signaling of Dectin-1 which is important in the innate immune response against fungal infection. Conversely, it has been demonstrated that inhibition of calcineurin in macrophages enhances NF-κB activation and can trigger TLR signaling by activating both the MyD88-dependent and the MyD88-independent pathways.


CHEMICAL PROPERTIES

CAS number: 59865-13-3
Formula: C_{62}H_{111}N_{11}O_{12}
Molecular weight: 1202.61 g/mol
Solubility: DMSO (50 mg/ml)
Working concentration: 50 nM - 1.5 µM
Structure:

METHODS

Preparation of Cyclosporin A stock solution (10 mM)
1. Weigh 10 mg of Cyclosporin A and place in a sterile tube.
2. Add 830 µl DMSO to 10 mg Cyclosporin A.
3. Vortex until complete solubilization.
4. Prepare aliquots and store stock solution at -20°C.

RELATED PRODUCTS

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<thead>
<tr>
<th>Product</th>
<th>Description</th>
<th>Catalog Code</th>
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<tbody>
<tr>
<td>Rapamycin</td>
<td>mTOR inhibitor</td>
<td>tlrl-rap</td>
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<tr>
<td>Bafilomycin</td>
<td>A1 autophagy inhibitor</td>
<td>tlrl-baf</td>
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<tr>
<td>LY294002</td>
<td>PI3K inhibitor</td>
<td>tlrl-ly29</td>
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<tr>
<td>Wortmannin</td>
<td>PI3K inhibitor</td>
<td>tlrl-wtm</td>
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</tbody>
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TECHNICAL SUPPORT

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