FK506
Calcineurin Inhibitor
Catalog # tlrl-fk5
For research use only
Version # 15K03-MM

PRODUCT INFORMATION
Content:
• 10 mg FK506

Storage and stability:
- FK506 is provided as a translucent film and shipped at room temperature. Store at -20 °C. Solid product is stable for 2 years at -20 °C.
- Upon resuspension, prepare aliquots of FK506 and store at -20 °C. Avoid repeated freeze-thaw cycles. Resuspended product is stable for 1 month at -20 °C when properly stored.

CHEMICAL PROPERTIES
Synonym: Tacrolimus
CAS number: 109581-93-3
Formula: C44H69NO12
Molecular weight: 822.03
Solubility: 100 mg/ml in DMSO
Working concentration: 1 - 100 nM
Structure:

DESCRIPTION
FK506 (Tacrolimus) is commonly used as an immunosuppressant to prevent the rejection of organ transplants. Similarly to cyclosporin A (CsA), FK506 blocks the activation of calcineurin through the formulation of complexes with immunophilins. FK506 binds to a different immunophilin than CsA, called FK506 binding protein (FKBP). Further, it has been demonstrated that the FK506–FKBP complex suppresses the activation of the calcineurin-independent NFAT pathway and calcineurin-independent activation pathway for JNK and p38.


METHODS
Preparation of FK-506 stock solution (20 mM)
1. Add 608 µl DMSO to 10 mg FK-506.
2. Vortex until complete solubilization.
3. Prepare aliquots and store stock solution at -20 °C.
4. Further dilutions can be prepared using aqueous buffers. We do not recommend storing the aqueous solution for more than one day.

RELATED PRODUCTS
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<tr>
<th>Product</th>
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<tbody>
<tr>
<td>Cyclosporin A (calcineurin inhibitor)</td>
<td>tlrl-cyca</td>
</tr>
<tr>
<td>SB202190 (p38 MAP kinase inhibitor)</td>
<td>tlrl-sb90</td>
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<tr>
<td>SB203580 (p38 MAP kinase inhibitor)</td>
<td>tlrl-sb20</td>
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<tr>
<td>SP600125 (JNK inhibitor)</td>
<td>tlrl-sp60</td>
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Other signal transduction inhibitors are available, for more information visit www.invivogen.com/inhibitors