LY223982

Cat. No.: HY-112737  
CAS No.: 117423-74-2  
Molecular Formula: C₃₀H₃₀O₇  
Molecular Weight: 502.56  
Target: Leukotriene Receptor  
Pathway: GPCR/G Protein  
Storage:  
Powder: -20°C 3 years  
In solvent: -80°C 6 months; -20°C 1 month

**SOLVENT & SOLUBILITY**

**In Vitro**  
DMSO: 100 mg/mL (198.98 mM; Need ultrasonic)  
H₂O: < 0.1 mg/mL (insoluble)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>1 mM</td>
<td></td>
<td>1.9898 mL</td>
<td>9.9491 mL</td>
<td>19.8981 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.3980 mL</td>
<td>1.9898 mL</td>
<td>3.9796 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.1990 mL</td>
<td>0.9949 mL</td>
<td>1.9898 mL</td>
</tr>
</tbody>
</table>

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

**In Vivo**  
1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline  
   Solubility: ≥ 2.5 mg/mL (4.97 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)  
   Solubility: 2.5 mg/mL (4.97 mM); Precipitated solution; Need ultrasonic
3. Add each solvent one by one: 10% DMSO >> 90% corn oil  
   Solubility: ≥ 2.5 mg/mL (4.97 mM); Clear solution

**BIOLOGICAL ACTIVITY**

**Description**  
LY223982 is a potent and specific inhibitor of leukotriene B4 receptor, with an IC₅₀ of 13.2 nM against [³H]LTB4 binding to LTB4 receptor.

**IC₅₀ & Target**  
LTB₄  
13.2 nM (IC₅₀)
| In Vitro | LY223982 is a potent and specific inhibitor of leukotriene B4 (LTB4) receptor, with an IC₅₀ of 13.2 nM against [³H]LTB4 binding to LTB4 receptor. LY223982 is also a potent antagonist of the aggregation of human neutrophils by LTB4 (IC₅₀, 100 nM)[¹]. |
| In Vivo | LY223982 inhibits transient leukopenia induced in rabbits with LTB4 (ED₅₀, 3 mg/kg) but not with FMLP, and shows no agonist activity in any of the test systems[¹]. |

REFERENCES