Flunixin meglumine

Cat. No.: HY-B0386
CAS No.: 42461-84-7
Molecular Formula: C₂₁H₂₈F₃N₃O₇
Molecular Weight: 491.46
Target: COX
Pathway: Immunology/Inflammation
Storage:
- Powder: -20°C for 3 years, 4°C for 2 years
- In solvent: -80°C for 6 months, -20°C for 1 month

SOLVENT & SOLUBILITY

**In Vitro**
DMSO: ≥ 100 mg/mL (203.48 mM)
H₂O: ≥ 44 mg/mL (89.53 mM)

* "≥" means soluble, but saturation unknown.

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass (mL)</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
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<td>5 mM</td>
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<td>10 mM</td>
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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 (5.09 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (5.09 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (5.09 mM); Clear solution

BIOLOGICAL ACTIVITY

**Description**
Flunixin Meglumine is a potent inhibitor of COX used as analgesic agent with anti-inflammatory and antipyretic activity. Target: COX
Flunixin meglumine is a potent, non-narcotic, non-steroidal analgesic agent with anti-inflammatory and antipyretic activity. It is a potent inhibitor of the enzyme cyclooxygenase. Flunixin meglumine therapy significantly (P less than or equal to 0.05) reduced rectal temperatures and quarter signs of inflammation and
improved clinically graded depression when compared with these signs in saline solution-treated controls [1]. Flunixin meglumine was selective inhibitor of COX-1. Carprofen inhibited LPS-induction of iNOS. Carprofen and, to a lesser degree, flunixin meglumine had inhibitory effects on NFκB activation [2].

<table>
<thead>
<tr>
<th>IC₅₀ &amp; Target</th>
<th>COX-2</th>
<th>COX-1</th>
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<td>0.4 nM (IC₅₀)</td>
<td>17 nM (IC₅₀)</td>
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REFERENCES
