AH 6809

**Cat. No.:** HY-10418

**CAS No.:** 33458-93-4

**Molecular Formula:** C₁₇H₁₄O₅

**Molecular Weight:** 298.29

**Target:** Prostaglandin Receptor

**Pathway:** GPCR/G Protein

**Storage:**
- Powder: -20°C, 3 years; 4°C, 2 years
- In solvent:
  - -80°C, 6 months
  - -20°C, 1 month

---

**SOLVENT & SOLUBILITY**

**In Vitro**

- **DMSO:** 25 mg/mL (83.81 mM; Need ultrasonic)
- **H₂O:** < 0.1 mg/mL (insoluble)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Mass Concentration</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td></td>
<td>3.3524 mL</td>
<td>16.7622 mL</td>
<td>33.5244 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.6705 mL</td>
<td>3.3524 mL</td>
<td>6.7049 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.3352 mL</td>
<td>1.6762 mL</td>
<td>3.3524 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 (8.38 mM); Suspended solution; Need ultrasonic

2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.5 mg/mL (8.38 mM); Suspended solution; Need ultrasonic

---

**BIOLOGICAL ACTIVITY**

**Description**

AH 6809 is an EP and DP receptor antagonist with nearly equal affinity for the cloned human EP1, EP2, EP3-III, and DP1 receptors.

- **IC₅₀ Value:** ~3 nM (EC₅₀ for calcium mobilization by PGE₂) [1]
- **Target:** EP/DP receptor

**in vitro:**

AH 6809 also antagonized the aggregatory effect of U-46619 in whole blood (pA² = 4.45). However, concentrations of AH6809 up to 300 microM were without effect upon either ADP- or platelet activating factor (Paf)-induced aggregation (pA² less than 3.5) [2]. Preincubation of control cells in 10⁻⁴ M concentrations of AH6809 inhibited PGE₂-induced activation of AC by greater than 80% without significant (P greater than .05) inhibition of basal activity by the antagonist [3].

**in vivo:**

Exposure to a selective COX-2 inhibitor (SC58125) or an EP1/EP2 antagonist (AH6809), but not an EP4 antagonist (AH238488), significantly reduced cell proliferation of esophageal explants in 24 hour-
organ culture experiments [4]. Oral administration of the EP1 receptor antagonist, AH6809 (10 mg/kg/day, for 4 days), significantly reduced the systolic blood pressure in db/db, but not in control mice [5].

REFERENCES

[1]. http://www.millipore.com/publications////////a7366f9f981af8c852569b9005b4e6e/3ae2c825891fbf78e85257b19005fa865/$FILE/HTS099C%20ep1%20datasheet%202009.pdf


