G15

Cat. No.: HY-103449
CAS No.: 1161002-05-6
Molecular Formula: C₁₉H₁₆BrNO₂
Molecular Weight: 370.24
Target: Estrogen Receptor/ERR
Pathway: Others
Storage: -20°C, protect from light

* In solvent: -80°C, 6 months; -20°C, 1 month (protect from light)

SOLVENT & SOLUBILITY

In Vitro

DMSO: 41.67 mg/mL (112.55 mM; Need ultrasonic)

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>Mass 1 mg</th>
<th>Mass 5 mg</th>
<th>Mass 10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td></td>
<td>2.7010 mL</td>
<td>13.5048 mL</td>
<td>27.0095 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.5402 mL</td>
<td>2.7010 mL</td>
<td>5.4019 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.2701 mL</td>
<td>1.3505 mL</td>
<td>2.7010 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: ≥ 2.08 mg/mL (5.62 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (5.62 mM); Clear solution

BIOLOGICAL ACTIVITY

Description
G15 is a high affinity and selective G-protein-coupled estrogen receptor (GPER/GPR30) antagonist with a Kᵢ of 20 nM[1][2].

IC₅₀ & Target
Ki: 20 nM (GPER/GPR30)[2]

In Vitro
G15 (0.1-10 μM; 2 days) inhibits GPER-mediated proliferation stimulated by 17β-estradiol (E2) in A549 and H1793 cell lines[1].
G15 (1 μM; 48 hours) inhibits the response of GPER stimulated by E2 and G1 in A549 and H1793 cell lines[1].

Cell Proliferation Assay[1]
Cell Line: A549, H1793 cell lines  
Concentration: 0.1, 1, 10 μM (combination with 10 nM E2)  
Incubation Time: 2 days  
Result: Inhibited GPER-mediated proliferation stimulated by E2.

**Western Blot Analysis[^1]**

Cell Line: A549, H1793 cell lines  
Concentration: 1 μM (combination with 10 nM E2 and 10 nM G1)  
Incubation Time: 48 hours  
Result: Inhibited the response of GPER stimulated by E2 and G1.

**In Vivo**

G15 (1.46 mg/kg; i.h.; twice a week for 14 weeks) decreases the number of tumor nodules and tumor index increased by the E2 or G1 group in urethane-induced adenocarcinoma mice[^1].

**Animal Model:** Four-week-old female Kunming mice (Urethane-induced adenocarcinoma[^3]).

**Dosage:** 1.46 mg/kg (combination with E2, 0.09 mg/kg and fulvestrant (Ful), 2.4 mg/kg).

**Administration:** Subcutaneous injection; twice a week for 14 weeks.

**Result:** The number of tumor nodules decreased in the E2+Ful+G15 group.

**REFERENCES**


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Caution: Product has not been fully validated for medical applications. For research use only.

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