GW9662

**Cat. No.:** A4300  
**CAS No.:** 22978-25-2  
**Formula:** C13H9ClN2O3  
**M.Wt:** 276.68  
**Synonyms:**  
**Target:** Metabolism  
**Pathway:** PPAR  
**Storage:** Store at -20°C

### Solvent & Solubility

≥13.75 mg/mL in DMSO, ≥9.08 mg/mL in EtOH with ultrasonic, insoluble in H2O

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Stock Solutions</th>
<th>Mass</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Concentration</strong></td>
<td><strong>Solvent</strong></td>
<td><strong>1mg</strong></td>
<td><strong>5mg</strong></td>
<td><strong>10mg</strong></td>
<td></td>
</tr>
<tr>
<td>1 mM</td>
<td>DMSO</td>
<td>3.6143 mL</td>
<td>18.0714 mL</td>
<td>36.1428 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>DMSO</td>
<td>0.7229 mL</td>
<td>3.6143 mL</td>
<td>7.2286 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>DMSO</td>
<td>0.3614 mL</td>
<td>1.8071 mL</td>
<td>3.6143 mL</td>
<td></td>
</tr>
</tbody>
</table>

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

### Biological Activity

**Short summary**  
PPARγ antagonist

**IC_{50} & Target**  
3.3 µM (human) (PPARγ)

**Cell Viability Assay**

**Cell Line:** Human breast cancer cell lines MCF7, MDA-MB-468 and MDA-MB-231  
**Preparation method:** The solubility of this compound in DMSO is ≥ 13.75 mg/mL. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20 °C for several months.  
**Reacting conditions:** 0.1 ~ 50 µM, 72 hrs  
**Applications:** In all the three human breast cancer cell lines, GW9662 resulted in comparable
loss of cell viability. In MDA-MB-231 cells, GW9662 in combination with Rosiglitazone caused an additive effect on cell survival instead of the predicted subtractive effect. Analysis of the cellular growth kinetics of MDA-MB-231 cells further confirmed that GW9662 did not prevent Rosiglitazone-induced growth inhibition, but strengthened the effect of Rosiglitazone.

In Vivo Animal experiment

<table>
<thead>
<tr>
<th>Animal models:</th>
<th>A rat model of renal ischemia-reperfusion (I/R)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage form:</td>
<td>1 mg/kg; i.p.; 12 and 24 hrs prior to ischemia</td>
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<tr>
<td>Applications:</td>
<td>In a rat model of renal I/R, GW9662 abolished lipopolysaccharide (LPS) pretreatment-induced creatinine clearance. Administration of GW9662 to LPS-pretreated I/R rats increased fractional excretion of Na+ and reduced urine flow, thus attenuating the protective effect on tubular dysfunction mediated by LPS. In addition, the attenuation in serum aspartate aminotransferase and γ-glutamyl transferase after LPS pretreatment was reversed by GW9662.</td>
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<tr>
<td>Other notes:</td>
<td>Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.</td>
</tr>
</tbody>
</table>

Product Citations


References


Caution

FOR RESEARCH PURPOSES ONLY.
NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Shortterm storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt
of the product, follow the storage recommendations on the product data sheet.