**Cat. No.:** B2287  
**CAS No.:** 396129-53-6  
**Formula:** C17H12N4  
**M.Wt:** 272.3  
**Solvent & Solubility:**

Insoluble in EtOH; insoluble in H2O; ≥ 24.4 mg/mL in DMSO

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>Mass</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td></td>
<td>3.6724 mL</td>
<td>18.3621 mL</td>
<td>36.7242 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td></td>
<td>0.7345 mL</td>
<td>3.6724 mL</td>
<td>7.3448 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td></td>
<td>0.3672 mL</td>
<td>1.8362 mL</td>
<td>3.6724 mL</td>
</tr>
</tbody>
</table>

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

**Biological Activity:**

**Shortsummary:**
inhibitor of TGF-β type I receptor kinase domain

**IC50 & Target:**

**Cell Viability Assay**

**Cell Line:** HOXB9-MCF10A cells

**Preparation method:** The solubility of this compound in DMSO is limited. 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:** 10 μM; 24 hrs
In HOXB9

In HOXB9-MCF10A cells, LY364947 suppressed Smad2 phosphorylation by inhibiting TGF-β activation, meanwhile, without affecting the expression of TGF-β1 and TGF-β2. Besides, LY364947 induced epithelial morphological changes, with re-expression of E-cadherin as well as suppression of fibronectin and vimentin. In addition, LY364947 reduced migration and invasiveness of HOXB9-MCF10A cells.

### Applications:

<table>
<thead>
<tr>
<th>Applications:</th>
<th>In a rat model of NMDA-induced retinal degeneration, LY364947 significantly suppressed cell loss in the ganglion cell layer induced by NMDA. Besides, LY364947 markedly prevent vascular damage in the injured retina caused by NMDA. In addition, co-treatment with NMDA and LY364947 did not cause any morphological change of NG2-positive pericytes.</th>
</tr>
</thead>
</table>

### Animal models:

A rat model of NMDA-induced retinal degeneration

### Dosage form:

50 nM; 5μL; intravitreal injection

### Other notes:

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.

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### Product Citations


See more customer validations on [www.apexbt.com](http://www.apexbt.com).

### References


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### 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. Short-term 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.

APExBIO Technology

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