**Go 6976**

Cat. No.: A8341  
CAS No.: 136194-77-9  
Formula: C$_{24}$H$_{18}$N$_4$O  
M.Wt: 378.43  
Synonyms: Go6976;Go-6976  
Target: TGF-β / Smad Signaling  
Pathway: PKC  
Storage: Desiccate at -20°C

### Solvent & Solubility

≥15.77 mg/mL in DMSO

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass Concentration</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
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<tr>
<td></td>
<td>5 mM</td>
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<td></td>
<td>10 mM</td>
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Please refer to the solubility information to select the appropriate solvent.

### Biological Activity

**Shortsummary**  
PKCa/PKCβ1 inhibitor

**IC$_{50}$ & Target**  
In Vitro

**Cell Viability Assay**  
**Cell Line:** HEL cells  
**Preparation method:** The solubility of this compound in DMSO is > 10 mM. 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:** 4 h, 1 µM
Go 6976 is a selective inhibitor of the calcium-dependent isozymes of protein kinase C (PKC) and has a direct and potent inhibitory effect on JAK2 in vitro. Go 6976 also blocked signalling, proliferation and survival in cells expressing TEL-JAK2 fusion protein. In primary acute myeloid leukaemia cells, treatment with Go 6976 reduced STAT phosphorylation and constitutive STAT activity.

**Animal experiment**

<table>
<thead>
<tr>
<th>Animal models:</th>
<th>6-8 week-old Balb/c mice</th>
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<tr>
<td>Dosage form:</td>
<td>2.5 mg/kg, i.p.</td>
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</table>

Go 6976 significantly inhibited LPS-induced protein kinase D activation, relieved LPS/D-GalN-induced liver injury and improved the survival of LPS/D-GalN-administered mice. Go 6976 could also inhibit the activation of mitogen-activated protein kinases (MAPKs), reduce expression of tumor necrosis factor-α (TNF-α), and decrease apoptosis and myeloperoxidase (MPO) activity in liver of mice.

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


### 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 APExBIO 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.