Sorafenib

Cat. No.: A3009
CAS No.: 294451-73-0
Formula: C21H16ClF3N4O3
M.Wt: 464.82
Synonyms: 4Y-43-9006,Sorafenib,Nexavar,sorafenibum
Target: Tyrosine Kinase
Pathway: PDGFR
Storage: Store at -20°C

Solvent & Solubility

Concentration: 

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent</th>
<th>Mass</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>1mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5mg</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10mg</td>
</tr>
<tr>
<td>1 mM</td>
<td>2.1514 mL</td>
<td>10.7569 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4303 mL</td>
<td>2.1514 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2151 mL</td>
<td>1.0757 mL</td>
</tr>
</tbody>
</table>

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

Biological Activity

Shortsummary: Raf kinases and tyrosine kinases inhibitor

IC50 & Target: 
22 nM (B-Raf), 90 nM (VEGFR2), 57 nM (PDGFR β)

Cell Viability Assay

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: IC50: 6.3 μM for PLC/PRF/5 cells 4.5 μM for HepG2 cells 72 hours

Applications: The effect of sorafenib on cell proliferation was measured by CellTiter-Glo
In Vivo

<table>
<thead>
<tr>
<th>Animal models:</th>
<th>Female CB17 SCID mice injected with PLC/PRF/5 cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage form:</td>
<td>Oral administration; 10, 30, and 100 mg/kg body weight, once daily for 16 or 21 days</td>
</tr>
<tr>
<td>Applications:</td>
<td>Sorafenib tosylate produced dose-dependent growth inhibition of s.c. implanted PLC/PRF/5 tumor xenografts in SCID mice. Dose levels of 10 and 30 mg/kg produced significant and dose-dependent TGIs of 49% and 78%, respectively. Sorafenib tosylate produced durable partial tumor regressions in 50% of the mice at the 100 mg/kg dose level.</td>
</tr>
<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**


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 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.