Product Name: Obatoclax mesylate (GX15-070)  
Revision Date: 01/10/2020

Obatoclax mesylate (GX15-070)

Cat. No.: A4194  
CAS No.: 803712-79-0  
Formula: C20H19N3O·CH4O3S  
M.Wt: 413.5  

Synonyms:  
Target: Apoptosis  
Pathway: Bcl-2 Family  
Storage: Store at -20°C

Solvent & Solubility

≥20.7 mg/mL in DMSO, ≥3.15 mg/mL in EtOH with ultrasonic and warming, insoluble in H2O

<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>1 mM</td>
<td>2.4184 mL</td>
<td>12.0919 mL</td>
<td>24.1838 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4837 mL</td>
<td>2.4184 mL</td>
<td>4.8368 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2418 mL</td>
<td>1.2092 mL</td>
<td>2.4184 mL</td>
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</tbody>
</table>

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

Biological Activity

Short summary: Potent Bcl-2 inhibitor  
IC50 & Target: 0.22 μM (Ki) (Bcl-2)

Cell Viability Assay

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>UMSCC-22A cells stably expressing GFP-LC3</th>
</tr>
</thead>
</table>

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: 200 nM, 48 hours

Applications: After the treatment, cells were fixed in 4% paraformaldehyde and then stained.
with Hoechst 33258. A confocal microscope was used to visualize GFP-LC3 punctate dots. Treatment of these cells for 24 or 48 h with obatoclax (100 or 200 nM) resulted in relocalization of the GFP-LC3 protein to punctate cytoplasmic dots, an indicator of autophagosome formation. Treatment with obatoclax resulted in an approximately 10-fold increase in the average number of puncta per cell at 48 h as well as 24 h.

<table>
<thead>
<tr>
<th>Animal models:</th>
<th>Beige-nude-XID mice injected with SUDHL4 cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage form:</td>
<td>Intraperitoneal injection, 3.0 mg/kg</td>
</tr>
<tr>
<td>Applications:</td>
<td>Obatoclax (3.0 mg/kg) had little effect on tumor growth while carfilzomib (2.0 mg/kg) by itself significantly reduced tumor size. Combined treatment resulted in minimal tumor growth, an effect significantly greater than that observed with either agent alone. IVIS imaging of luciferase-expressing tumor cells confirmed the marked reduction in tumor growth with combined therapy. Kaplan-Meier analysis also demonstrated that that carfilzomib significantly increased the survival of obatoclax-treated mice.</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**


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**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.