**Ezetimibe**

**Cat. No.:** A8430  
**CAS No.:** 163222-33-1  
**Formula:** C24H21F2NO3  
**M.Wt:** 409.4

**Synonyms:**

**Target:** Metabolism  
**Pathway:** Cholesterol absorption  
**Storage:** Store at -20°C

### Solvent & Solubility

<table>
<thead>
<tr>
<th>Solvent</th>
<th>Mass</th>
<th>Concentration</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>DMSO</td>
<td>1 mM</td>
<td></td>
<td>2.4426 mL</td>
<td>12.2130 mL</td>
<td>24.4260 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td></td>
<td>0.4885 mL</td>
<td>2.4426 mL</td>
<td>4.8852 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td></td>
<td>0.2443 mL</td>
<td>1.2213 mL</td>
<td>2.4426 mL</td>
</tr>
</tbody>
</table>

≥20.45 mg/mL in DMSO

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

### Biological Activity

**Shortsummary**  
Cholesterol transport inhibitor

**IC₅₀ & Target**  

**Cell Viability Assay**

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>Caco-2 cell lines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation method:</td>
<td>The solubility of this compound in DMSO is ≥20.5mg/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.</td>
</tr>
<tr>
<td>Reacting conditions:</td>
<td>1-10 µg/mL</td>
</tr>
</tbody>
</table>
Applications: In Caco-2 cells, ezetimibe is an inhibitor of carotenoid transport, an effect that decreases with increasing polarity of the carotenoid molecule. Ezetimibe does not only interact physically with cholesterol transporter, but also downregulate expression of these proteins.

In Vivo

Animal experiment

Animal models: apolipoprotein E knockout (apoE−/−) mice
Dosage form: 5 mg/kg per day for 6 months
Applications: Ezetimibe inhibits cholesterol absorption, reduces plasma cholesterol, increases high density lipoprotein levels, and inhibits the progression of atherosclerosis under western, low-fat, and cholesterol-free dietary conditions in apoE−/− 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.

Product Citations


References


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. 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.