**Phenformin HCl**

**Cat. No.:** B1373  
**CAS No.:** 834-28-6  
**Formula:** C10H16ClN5  
**M.Wt:** 241.72  
**Synonyms:** \( \text{Synonyms:} \)  
**Target:** Others  
**Pathway:** Others  
**Storage:** Store at -20°C

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**Solvent & Solubility**

≥ 12.1 mg/mL in DMSO

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Solvent Concentration</th>
<th>Mass</th>
<th>1 mg</th>
<th>5 mg</th>
<th>10 mg</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 mM</td>
<td></td>
<td>4.1370 mL</td>
<td>20.6851 mL</td>
<td>41.3702 mL</td>
</tr>
<tr>
<td></td>
<td>5 mM</td>
<td></td>
<td>0.8274 mL</td>
<td>4.1370 mL</td>
<td>8.2740 mL</td>
</tr>
<tr>
<td></td>
<td>10 mM</td>
<td></td>
<td>0.4137 mL</td>
<td>2.0685 mL</td>
<td>4.1370 mL</td>
</tr>
</tbody>
</table>

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

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**Biological Activity**

**Shortsummary**  
biguanidine drug with anti-diabetic activity

**IC₅₀ & Target**

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**Cell Viability Assay**

**Cell Line:** BRAFV600E Me-1 melanoma cells and HEK-293 cells

**Preparation method:** The solubility of this compound in DMSO is > 12.1 mg/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.

**Reacting conditions:** 1 or 5 mM; 2 hrs

**Applications:** In BRAFV600E Me-1 melanoma cell line (with impaired AMPK activation), 1
This is caused by the increase in phosphorylation of a key AMPK downstream target (ACC). 45

Phenformin/PLX4720 combination dramatically promoted apoptotic cell death and inhibited tumor cell proliferation. According to immunohistochemical analyses of these tumors, the Phenformin/PLX4720 combination dramatically promoted apoptotic cell death and inhibited tumor cell proliferation.


References


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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.