**MLN4924**

Cat. No.: B1036  
CAS No.: 905579-51-3  
Formula: C21H25N5O4S  
M.Wt: 443.53  

**Synonyms:**

**Target:** Others  
**Pathway:** NAE  
**Storage:** Store at -20°C

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**Solvent & Solubility**

<table>
<thead>
<tr>
<th>Preparing Stock Solutions</th>
<th>Mass</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solvent Concentration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 mM</td>
<td>2.2546 mL</td>
<td>11.2732 mL</td>
<td>22.5464 mL</td>
<td></td>
</tr>
<tr>
<td>5 mM</td>
<td>0.4509 mL</td>
<td>2.2546 mL</td>
<td>4.5093 mL</td>
<td></td>
</tr>
<tr>
<td>10 mM</td>
<td>0.2255 mL</td>
<td>1.1273 mL</td>
<td>2.2546 mL</td>
<td></td>
</tr>
</tbody>
</table>

≥22.2mg/mL in DMSO

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

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**Biological Activity**

**Shortsummary**  
NAE inhibitor

**IC₅₀ & Target**

**Cell Viability Assay**

<table>
<thead>
<tr>
<th>Cell Line:</th>
<th>HCT-116 cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation method:</td>
<td>Limited solubility. 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>24 h</td>
</tr>
</tbody>
</table>
| Applications: | Treatment of HCT-116 cells with MLN4924 for 24h results in a dose-dependent decrease of Ubc12--NEDD8 thioester and NEDD8--cullin conjugates, with an
IC50 <0.1 μM, causing a reciprocal increase in the abundance of the known CRL substrates CDT1, p27 and NRF2. In HCT-116 cells, the most prominent phenotype observed was the disruption of S-phase regulation leading to cellular death. By 24h, a significant fraction of cells contained ≥4N DNA content.

**Animal experiment**

- **Animal models:** HCT-116 tumour-bearing mice
- **Dosage form:** Subcutaneous injection once (QD) or twice (BID) daily
- **Applications:** 30 mg/kg-1 and 60 mg/kg-1 MLN4924 significantly inhibits tumor growth on a once daily. Moreover, MLN4924 administered once daily for three cycles of two-day treatment followed by five treatment-free days, results in modest but significant tumor growth inhibition. All doses and schedules were well tolerated, with an average weight loss for all dose groups at the end of treatment of less than 10%.

**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).

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**References**


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**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. 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.