**P005091**

**Cat. No.:** A3023  
**CAS No.:** 882257-11-6  
**Formula:** C12H7Cl2NO3S2  
**M.Wt:** 348.22  
**Synonyms:** P005091,P5091  
**Target:** Ubiquitination/Proteasome  
**Pathway:** DUB  
**Storage:** Store at 4°C

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**Solvent & Solubility**

Insoluble in H2O; insoluble in EtOH; $\geq 17.4$ mg/mL in DMSO

<table>
<thead>
<tr>
<th>Mass (mg)</th>
<th>Solvent Concentration</th>
<th>1mg</th>
<th>5mg</th>
<th>10mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 mM</td>
<td></td>
<td>2.8717 mL</td>
<td>14.3587 mL</td>
<td>28.7175 mL</td>
</tr>
<tr>
<td>5 mM</td>
<td></td>
<td>0.5743 mL</td>
<td>2.8717 mL</td>
<td>5.7435 mL</td>
</tr>
<tr>
<td>10 mM</td>
<td></td>
<td>0.2872 mL</td>
<td>1.4359 mL</td>
<td>2.8717 mL</td>
</tr>
</tbody>
</table>

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

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**Biological Activity**

**Shortsummary**  
Ubiquitin-specific protease 7 (USP7) inhibitor

**IC₅₀ & Target**

**Cell Viability Assay**

**Cell Line:** NCI-60 human tumor cell line.  
**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:** Growth inhibition: 48 h. Cytotoxic activity: 72 h. Solubilized in 100% (v/v) DMSO
Applications: P005091 exhibits growth inhibition with GI50 value of 1.82 μM in HL-60(TB) cell line and exhibits broad growth inhibition. In HCT-116 cells, P005091 shows cytotoxic activity with EC50 value of 9.21 μM.

**Animal experiment**

<table>
<thead>
<tr>
<th>Animal models:</th>
<th>Severe combined immunodeficient (SCID) mice inoculated subcutaneously with human multiple myeloma tumor cells.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dosage form:</td>
<td>10 mg/kg; intravenously twice a week for three weeks.</td>
</tr>
<tr>
<td>Applications:</td>
<td>In SCID mice, P5091 significantly inhibits human plasmacytoma growth and enhances survival.</td>
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<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


### 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 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.