### Overview

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product name</strong></td>
<td>1,10-Phenanthroline, Metalloprotease inhibitor</td>
</tr>
<tr>
<td><strong>Description</strong></td>
<td>Membrane permeable chelating agent. Metalloprotease inhibitor.</td>
</tr>
<tr>
<td><strong>Biological description</strong></td>
<td>Membrane permeable chelating agent. Metalloprotease inhibitor. Chelates intracellular heavy metals including zinc, copper and iron. Binds DNA and modulates multiple signaling pathways in vitro and in vivo.</td>
</tr>
<tr>
<td><strong>Purity</strong></td>
<td>&gt; 99%</td>
</tr>
<tr>
<td><strong>CAS Number</strong></td>
<td>66-71-7</td>
</tr>
<tr>
<td><strong>Chemical structure</strong></td>
<td><img src="image" alt="Chemical structure" /></td>
</tr>
</tbody>
</table>

### Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Chemical name</strong></td>
<td>1,10-Phenanthroline</td>
</tr>
<tr>
<td><strong>Molecular weight</strong></td>
<td>180.21</td>
</tr>
<tr>
<td><strong>Molecular formula</strong></td>
<td>C₁₂H₈N₂</td>
</tr>
<tr>
<td><strong>PubChem identifier</strong></td>
<td>1318</td>
</tr>
<tr>
<td><strong>Storage instructions</strong></td>
<td>Store at Room Temperature. Store under desiccating conditions. The product can be stored for up to 12 months.</td>
</tr>
<tr>
<td><strong>Solubility overview</strong></td>
<td>Soluble in DMSO to 100 mM and in ethanol to 100 mM</td>
</tr>
<tr>
<td><strong>Handling</strong></td>
<td>Wherever possible, you should prepare and use solutions on the same day. However, if you need to make up stock solutions in advance, we recommend that you store the solution as aliquots in tightly sealed vials at -20°C. Generally, these will be useable for up to one month. Before use, and prior to opening the vial we recommend that you allow your product to equilibrate to room temperature for at least 1 hour. Toxic, refer to SDS for further information. Need more advice on solubility, usage and handling? Please visit our <a href="#">frequently asked questions (FAQ) page</a> for more details.</td>
</tr>
<tr>
<td><strong>SMILES</strong></td>
<td>c1ccnc3c1ccc2cccn23</td>
</tr>
<tr>
<td><strong>Source</strong></td>
<td>Synthetic</td>
</tr>
</tbody>
</table>
Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES, NOT FOR USE IN HUMANS"

**Our Abpromise to you: Quality guaranteed and expert technical support**

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit [https://www.abcam.com/abpromise](https://www.abcam.com/abpromise) or contact our technical team.

**Terms and conditions**

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors
- Abcam biochemicals are novel compounds and we have not tested their biological activity in house. Please use the literature to identify how to use these products effectively. If you require further assistance please contact the scientific support team.