Product Name: Liarozole dihydrochloride  
IUPAC Name: 5-[(3-Chlorophenyl)-1H-imidazol-1-ylmethyl]-1H-benzimidazole dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: $C_{17}H_{13}ClN_4\cdot2HCl\cdot\frac{3}{4}H_2O$
Batch Molecular Weight: 395.2
Physical Appearance: Beige solid
Solubility: DMSO to 100 mM  
water to 100 mM
Storage: Desiccate at RT

2. ANALYTICAL DATA

TLC: $R_f = 0.2$ (Dichloromethane:Methanol [9:1])
HPLC: Shows 99% purity
$^1$H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>51.67</td>
<td>4.21</td>
</tr>
<tr>
<td>Found</td>
<td>51.43</td>
<td>4.36</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Information

<table>
<thead>
<tr>
<th>Product Name:</th>
<th>Liarozole dihydrochloride</th>
<th>Catalog No.:</th>
<th>2705</th>
</tr>
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<td>4</td>
</tr>
</tbody>
</table>

**Description:**
Cytochrome P450 inhibitor. Inhibits several cytochrome P450 enzymes including aromatase (CYP19) and retinoic acid 4-hydroxylase (CYP26). Blocks retinoic acid metabolism (retinoic acid metabolism blocking agent, RAMBA). Displays antitumor activity against androgen-dependent and independent rat prostate carcinomas.

**Physical and Chemical Properties:**
- **Batch Molecular Formula:** C\textsubscript{17}H\textsubscript{13}ClN\textsubscript{2}.2HCl.\textsubscript{3/4}H\textsubscript{2}O
- **Batch Molecular Weight:** 395.2
- **Physical Appearance:** Beige solid
- **Minimum Purity:** >99%

**Storage:** Desiccate at RT

**Solubility & Usage Info:**
- DMSO to 100 mM
- Water to 100 mM

**Stability and Solubility Advice:**
Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).
Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:
- **SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.
- **SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

**References:**