Product Name: Ranolazine dihydrochloride  
Catalog No.: 3118  
Batch No.: 2

CAS Number: 95635-56-6

IUPAC Name: N-(2,6-Dimethylphenyl)-4-[2-hydroxy-3-(2-methoxyphenoxy)propyl]-1-piperazineacetamide dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{24}H_{33}N_{3}O_{4}.2\text{HCl}.\frac{1}{2}\text{H}_{2}O \)
Batch Molecular Weight: 509.47
Physical Appearance: White solid
Solubility:
- Water to 100 mM
- DMSO to 100 mM
Storage: Desiccate at RT

Batch Molecular Structure:

![Molecular Structure](image)

2. ANALYTICAL DATA

HPLC: Shows 98.7% purity

\(^1\)H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
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<tr>
<td>Theoretical</td>
<td>56.58</td>
<td>7.12</td>
<td>8.25</td>
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<tr>
<td>Found</td>
<td>56.3</td>
<td>7.13</td>
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</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
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Catalog No.: 3118 Batch No.: 2

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Description:
Antianginal agent with antiarrhythmic properties that acts as a partial fatty acid oxidation inhibitor. Activates pyruvate dehydrogenase in ischemic myocytes to promote glucose oxidation, switching substrate utilization from fatty acids to glucose. Also shown to inhibit late \( I_{Na} \) and \( I_{Kr} \) currents.

Physical and Chemical Properties:
Batch Molecular Formula: \( C_{22}H_{33}N_2O_5 \cdot 2HCl \cdot \frac{1}{2}H_2O \)
Batch Molecular Weight: 509.47
Physical Appearance: White solid
Minimum Purity: >98%

Storage: Desiccate at RT

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