Product Name: Alfuzosin hydrochloride

CAS Number: 81403-68-1

IUPAC Name: N-[3-[(4-Amino-6,7-dimethoxy-2-quinazolinyl)methylamino]propyl]tetrahydro-2-furancarboxamide hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

- Batch Molecular Formula: \( \text{C}_{19}\text{H}_{27}\text{N}_{5}\text{O}_{4}\text{HCl} \cdot 1\frac{1}{4}\text{H}_{2}\text{O} \)
- Batch Molecular Weight: 448.43
- Physical Appearance: White crystalline solid
- Solubility: water to 25 mM, DMSO to 25 mM
- Storage: Store at RT

2. ANALYTICAL DATA

- Melting Point: Between 226 - 228°C
- HPLC: Shows >99.3% purity
- \(^1\text{H NMR:}\) Consistent with structure
- Mass Spectrum: Consistent with structure
- Microanalysis:
  
<table>
<thead>
<tr>
<th>Element</th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>50.89</td>
<td>50.9</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>6.86</td>
<td>6.61</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>15.62</td>
<td>15.35</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: Alfuzosin hydrochloride

CAS Number: 81403-68-1

IUPAC Name: N-[3-[(4-Amino-6,7-dimethoxy-2-quinazolinyl)methylamino]propyl]tetrahydro-2-furancarboxamide hydrochloride

Description:
Functionally uro-selective α₁ adrenoceptor antagonist that does not discriminate between α₁ subtypes. Inhibits increases in intraurethral pressure caused by phenylephrine-induced contraction by 81% with minor cardiovascular effects. Also relaxes corpus cavernosum tissue (pIC₅₀ = 7.64) in vitro.

Physical and Chemical Properties:
Batch Molecular Formula: C₁₉H₂₉N₄O₈.HCl.1¼H₂O
Batch Molecular Weight: 448.43
Physical Appearance: White crystalline solid
Minimum Purity: >99%

References:
Palea and Barras (2003) Comparison of the relaxant effects of alfuzosin, phentolamine and sildenafil on rabbit isolated corpus cavernosum. BJU Int. 91 873. PMID: 12780851.