Product Name: Trequinsin hydrochloride
Catalog No.: 2337
Batch No.: 1

CAS Number: 78416-81-6
IUPAC Name: 2,3,6,7-Tetrahydro-9,10-dimethoxy-3-methyl-2-[(2,4,6-trimethylphenyl)imino]-4H-pyrimido[6,1-a]isoquinolin-4-one hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C_{24}H_{27}N_{3}O_{3}.HCl
Batch Molecular Weight: 441.95
Physical Appearance: Pale yellow solid
Solubility: DMSO to 100 mM, ethanol to 100 mM
Storage: Desiccate at RT

2. ANALYTICAL DATA

TLC: \( R_f = 0.2 \) (Ether:Petroleum ether [2:1])
HPLC: Shows 98.1% purity
\(^1\)H NMR: Consistent with structure
\(^1^3\)C NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
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<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
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<td>65.22</td>
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<tr>
<td>Found</td>
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</table>
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Description:
Highly potent inhibitor of cGMP-inhibited phosphodiesterase (PDE3; IC₅₀ = 250 pM). Potently inhibits arachidonic acid-induced aggregation of human platelets (IC₅₀ = 50 pM). Orally active antihypertensive agent; reduces systemic blood pressure in both normotensive and hypertensive animal models. Also activates CatSper channels, increases intracellular Ca²⁺ and cGMP levels, and decreases potassium channel activity in sperm.

Physical and Chemical Properties:
Batch Molecular Formula: C₂₄H₂₇N₂O₅.HCl
Batch Molecular Weight: 441.95
Physical Appearance: Pale yellow solid
Minimum Purity: >97%

Storage: Desiccate at RT

Solubility & Usage Info:
DMSO to 100 mM
ethanol 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: