Product Name: Fananserin
Catalog No.: 2645
Batch No.: 1
CAS Number: 127625-29-0
IUPAC Name: 2-[3-[4-(4-Fluorophenyl)-1-piperazinyl]propyl]-2H-naphthyl[1,8-cd]isothiazole-1,1-dioxide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{23}H_{24}FN_3O_2S.\frac{1}{2}H_2O \)
Batch Molecular Weight: 434.53
Physical Appearance: White solid
Solubility: DMSO to 100 mM
Storage: Store at RT

2. ANALYTICAL DATA

TLC: \( R_f = 0.6 \) (Ethyl acetate)
HPLC: Shows >99.5% purity
\(^1\)H NMR: Consistent with structure
Mass Spectral Data: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
<th>Sulfur</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theoretical</td>
<td>63.58</td>
<td>5.8</td>
<td>9.67</td>
<td>7.38</td>
</tr>
<tr>
<td>Found</td>
<td>63.78</td>
<td>5.63</td>
<td>9.68</td>
<td>7.41</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Description:
5-HT\textsubscript{2A} receptor antagonist that also displays high affinity at D\textsubscript{4} receptors (K\textsubscript{i} values are 0.26, 2.93, 25, 38, 70 and 726 nM for 5-HT\textsubscript{2A}, D\textsubscript{4}, α\textsubscript{1}, 5-HT\textsubscript{1A} and D\textsubscript{2} receptors respectively). Inhibits inositol phosphate formation evoked by 5-HT in vitro (IC\textsubscript{50} = 7.76 nM) and antagonizes mescaline-induced head twitches in vivo.

Physical and Chemical Properties:
Batch Molecular Formula: C\textsubscript{23}H\textsubscript{27}FN\textsubscript{2}O\textsubscript{5}S.\textsubscript{½}H\textsubscript{2}O
Batch Molecular Weight: 434.53
Physical Appearance: White solid
Minimum Purity: >99%

Storage: Store at RT

Solubility & Usage Info:
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:
