1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{16}H_{15}F_{3}N_{2}O_{4} \)
Batch Molecular Weight: 356.3
Physical Appearance: yellow solid
Solubility:
- ethanol to 100 mM
- DMSO to 100 mM
Storage: Store at +4°C

2. ANALYTICAL DATA

TLC: \( R_f = 0.4 \) (Chloroform:Methanol:Ammonia soln. [90:9:1])
HPLC: Shows 99.7% purity
\(^1\)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>53.94</td>
<td>53.98</td>
</tr>
<tr>
<td>Hydrogen</td>
<td>4.24</td>
<td>4.36</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>7.86</td>
<td>7.87</td>
</tr>
</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: (±)-Bay K 8644
Catalog No.: 1544 Batch No.: 4

CAS Number: 71145-03-4
IUPAC Name: 1,4-Dihydro-2,6-dimethyl-5-nitro-4-[2-(trifluoromethyl)phenyl]-3-pyridinecarboxylic acid, methyl ester

Description:
L-type Ca2+-channel activator (EC50 = 17.3 nM). Has positive inotropic, vasconstrictive and behavioral effects in vivo. Separate enantiomers (R)-(+)–Bay K 8644 and (S)-(−)-Bay K 8644 also available (Cat. Nos. 1545 and 1546 respectively). In combination with BIX-01294 (Cat. No. 3364), helps generate induced pluripotent stem cells (iPSCs) from mouse embryonic fibroblasts (MEFs). Inhibits autophagy.

Physical and Chemical Properties:
Batch Molecular Formula: C20H19F3N2O4
Batch Molecular Weight: 356.3
Physical Appearance: yellow solid
Minimum Purity: >99%

Batch Molecular Structure:

Storage: Store at +4°C

Solubility & Usage Info:
ethanol 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).

References: