Product Name: Efonidipine hydrochloride monoethanolate
Catalog No.: 3733
Batch No.: 1
CAS Number: 111011-76-8
IUPAC Name: 5-(5,5-Dimethyl-2-oxido-1,3,2-dioxaphosphorinan-2-yl)-1,4-dihydro-2,6-dimethyl-4-(3-nitrophenyl)-3-pyridinecarboxylic acid 2-[phenyl(phenylmethyl)amino]ethyl ester hydrochloride monoethanolate

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C_{34}H_{38}N_{3}O_{7}P.HCl.C_{2}H_{5}OH
Batch Molecular Weight: 714.18
Physical Appearance: Yellow solid
Solubility: DMSO to 100 mM
Storage: Desiccate at +4°C

2. ANALYTICAL DATA

HPLC: Shows 99.8% purity
{\textsuperscript{1}H} NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Found</th>
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<tbody>
<tr>
<td>Carbon</td>
<td>60.54</td>
<td>60.41</td>
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<tr>
<td>Hydrogen</td>
<td>6.35</td>
<td>6.33</td>
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<tr>
<td>Nitrogen</td>
<td>5.88</td>
<td>5.72</td>
</tr>
</tbody>
</table>

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Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

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**Product Name:** Efonidipine hydrochloride monoethanolate  
**Catalog No.:** 3733  
**Batch No.:** 1

### Description:
Selective blocker of L-type and T-type Ca\(^{2+}\) channels. Displays minimal inhibition of N- and P/Q-type channels and no inhibition of R-type channels. R(-) and S(+)-enantiomers display different channel selectivity; S(+)-Efonidipine blocks L-type and T-type channels whereas R(-)-Efonidipine displays selectivity for T-type channels. Exhibits antihypertensive activity.

### Physical and Chemical Properties:
- **Batch Molecular Formula:** C\(_{34}\)H\(_{59}\)N\(_2\)O\(_7\)P.HCl.C\(_2\)H\(_{5}\)OH
- **Batch Molecular Weight:** 714.18
- **Physical Appearance:** Yellow solid
- **Minimum Purity:** >99%

### Storage:
Desiccate at +4°C

### 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: