Product Name: NH 125
Catalog No.: 3439
Batch No.: 1

CAS Number: 278603-08-0
IUPAC Name: 1-Hexadecyl-2-methyl-3-(phenylmethyl)-1H-imidazolium iodide

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C27H45IN2
Batch Molecular Weight: 524.56
Physical Appearance: Off-white solid
Solubility:
- DMSO to 100 mM
- Ethanol to 75 mM
Storage: Desiccate at -20°C

2. ANALYTICAL DATA

Melting Point: Between 87 - 90°C

^1H NMR: Consistent with structure
Microanalysis:

<table>
<thead>
<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
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<tr>
<td>Theoretical</td>
<td>61.82</td>
<td>8.65</td>
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<td>Found</td>
<td>61.88</td>
<td>8.14</td>
<td>4.95</td>
</tr>
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</table>
Product Information

**Product Name:** NH 125

**CAS Number:** 278603-08-0

**IUPAC Name:** 1-Hexadecyl-2-methyl-3-(phenylmethyl)-1H-imidazolium iodide

**Description:**
Eukaryotic elongation factor 2 (eEF-2) kinase (CaMK III) inhibitor (IC$_{50}$ = 60 nM) that displays 125-fold, > 1300-fold and > 1500-fold selectivity over PKC, PKA and CaMK II respectively. Decreases the viability of a variety of cancer cell lines (IC$_{50}$ values are 0.7 - 4.8 μM) and blocks G$_{2}$/S cell cycle progression. Shown to induce eEF-2 phosphorylation in cancer cells. Also an effective antibacterial agent; inhibits histidine protein kinase in vitro (IC$_{50}$ = 6.6 μM) and in vivo.

**Physical and Chemical Properties:**

**Batch Molecular Formula:** C$_{27}$H$_{45}$IN$_{2}$

**Batch Molecular Weight:** 524.56

**Physical Appearance:** Off-white solid

**Batch Molecular Structure:**

![Molecular Structure](image)

**Storage:** Desiccate at -20°C

**Solubility & Usage Info:**
DMSO to 100 mM ethanol to 75 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:**


