Product Name: Icilin
CAS Number: 36945-98-9
IUPAC Name: 3,4-Dihydro-3-(2-hydroxyphenyl)-6-(3-nitrophenyl)-(1H)-pyrimidin-2-one

1. PHYSICAL AND CHEMICAL PROPERTIES

   Batch Molecular Formula: \( \text{C}_{16}\text{H}_{13}\text{N}_{3}\text{O}_{4} \)
   Batch Molecular Weight: 311.3
   Physical Appearance: Yellow solid
   Solubility: DMSO to 100 mM
   Storage: Store at RT
   Batch Molecular Structure:

   ![Batch Molecular Structure](image)

2. ANALYTICAL DATA

   TLC: \( R_f = 0.35 \) (Dichloromethane:Methanol [95:5])
   HPLC: Shows >98.6% purity
   \(^1\text{H} \text{NMR:}\) Consistent with structure
   Mass Spectrum: Consistent with structure
   Microanalysis:
   
<table>
<thead>
<tr>
<th></th>
<th>Theoretical</th>
<th>Found</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon</td>
<td>61.73</td>
<td>61.58</td>
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<tr>
<td>Hydrogen</td>
<td>4.21</td>
<td>4.18</td>
</tr>
<tr>
<td>Nitrogen</td>
<td>13.49</td>
<td>13.59</td>
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</tbody>
</table>

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Description:
Cooling agent that activates the novel cold receptors TRPM8 (CMR1) and TRPA1 (ANKTM1/TRPN1), members of the TRP ion channel family. Induces currents in CMR1-expressing HEK 293 cells (EC$_{50}$ = 0.36 μM) more potently than menthol or low temperatures. Produces “wet shakes” in vivo.

Physical and Chemical Properties:
Batch Molecular Formula: C$_{16}$H$_{13}$N$_2$O$_4$
Batch Molecular Weight: 311.3
Physical Appearance: Yellow solid
Minimum Purity: >98%

Batch Molecular Structure:

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:
Story et al (2003) ANKTM1, a TRP-like channel expressed in nociceptive neurons, is activated by cold temperatures. Cell 112 819. PMID: 12654248.