Product Name: GNTI dihydrochloride

CAS Number: 351183-88-5

IUPAC Name: 5'-Guanidinyl-17-(cyclopropylmethyl)-6,7-dehydro-4,5α-epoxy-3,14-dihydroxy-6,7-2',3'-indolomorphinan dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: \( C_{27}H_{29}N_5O_3 \cdot 2HCl \cdot 1\frac{1}{2}H_2O \)
Batch Molecular Weight: 571.5
Physical Appearance: White solid
Solubility: water to 100 mM
DMSO to 100 mM
Storage: Desiccate at -20°C

2. ANALYTICAL DATA

TLC: \( R_f = 0.3 \) (Dichloromethane:Methanol:Ammonia soln. [9:1:0.1])
Melting Point: Greater than 250°C (dec)
HPLC: Shows 96.8% purity
\(^1\)H NMR: Consistent with structure
Mass Spectrum: Consistent with structure
Microanalysis:

<table>
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<tr>
<th></th>
<th>Carbon</th>
<th>Hydrogen</th>
<th>Nitrogen</th>
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<tr>
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<td>6</td>
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<td>Found</td>
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<td>5.99</td>
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</tbody>
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Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use
Product Name: GNTI dihydrochloride
Catalog No.: 1282
Batch No.: 4

CAS Number: 351183-88-5
IUPAC Name: 5'-Guanidinyl-17-(cyclopropylmethyl)-6,7-dehydro-4,5α-epoxy-3,14-dihydroxy-6,7,2'-3'-indolomorphinan dihydrochloride

Description:
Highly potent κ opioid receptor antagonist (Kᵢ = 0.18 nM for human cloned κ receptors expressed in CHO cells). Displays 208- and 799-fold selectivity over μ and δ receptors respectively. Reduces feeding behavior in rats with a much higher potency (300-30,000-fold) and a shorter duration of action than norbinaltorphimine (Cat.No. 0347).

Physical and Chemical Properties:
Batch Molecular Formula: C₂₃H₂₆N₃O₅.2HCl.1½H₂O
Batch Molecular Weight: 571.5
Physical Appearance: White solid
Minimum Purity: >96%

Storage: Desiccate at -20°C
Solubility & Usage Info:
- water 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).
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: