

**Product Name:** NPS 2143 hydrochloride

**Catalog No.:** 3626

**Batch No.:** 2

CAS Number: 324523-20-8

IUPAC Name: 2-Chloro-6-[(2*R*)-3-[[1,1-dimethyl-2-(2-naphthalenyl)ethyl]amino]-2-hydroxypropoxy]benzonitrile hydrochloride

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>24</sub>H<sub>25</sub>ClN<sub>2</sub>O<sub>2</sub>.HCl

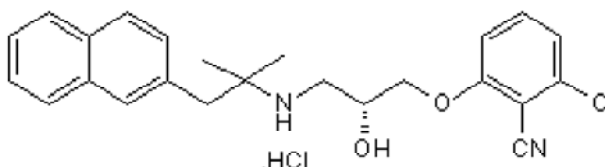
**Batch Molecular Weight:** 445.38

**Physical Appearance:** White solid

**Solubility:** DMSO to 100 mM  
ethanol to 10 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



## 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.35 (Dichloromethane:Methanol [9:1])

**HPLC:** Shows 99.8% purity

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	64.72	5.88	6.29
Found	64.71	5.94	6.21

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel: +1 612 379 2956

**Product Name:** NPS 2143 hydrochloride

**Catalog No.:** 3626

**Batch No.:** 2

CAS Number: 324523-20-8

IUPAC Name: 2-Chloro-6-[(2R)-3-[[1,1-dimethyl-2-(2-naphthalenyl)ethyl]amino]-2-hydroxypropoxy]benzotrile hydrochloride

**Description:**

Selective Ca<sup>2+</sup>-sensing receptor antagonist. Blocks increases in cytoplasmic Ca<sup>2+</sup> concentrations elicited by human Ca<sup>2+</sup> receptors expressed in HEK293 cells (IC<sub>50</sub> = 43 nM). Also stimulates parathyroid hormone secretion from bovine parathyroid cells (EC<sub>50</sub> = 41 nM). Orally active calcilytic compound.

**Physical and Chemical Properties:**

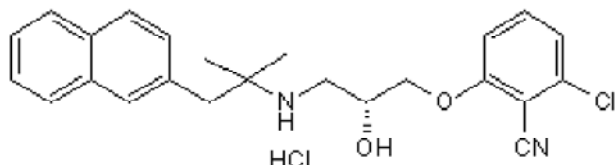
Batch Molecular Formula: C<sub>24</sub>H<sub>25</sub>ClN<sub>2</sub>O<sub>2</sub>.HCl

Batch Molecular Weight: 445.38

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**Solubility & Usage Info:**

DMSO to 100 mM

ethanol to 10 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:**

**Huang and Breitwieser** (2007) Rescue of calcium-sensing receptor mutants by allosteric modulators reveals a conformational checkpoint in receptor biogenesis. *J.Biol.Chem.* **282** 9517. PMID: 17284438.

**Nemeth** (2002) The search for calcium receptor antagonists (calcilytics). *J.Mol.Endocrinol.* **29** 15. PMID: 12200226.

**Nemeth et al** (2001) Calcilytic compounds: potent and selective Ca<sup>2+</sup> receptor antagonists that stimulate secretion of parathyroid hormone. *J.Pharmacol.Exp.Ther.* **299** 323. PMID: 11561095.

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

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956