

# NPS-2143

Catalog No: tcsc0319



## Available Sizes

**Size:** 5mg

**Size:** 10mg

**Size:** 50mg

**Size:** 100mg



## Specifications

**CAS No:**

284035-33-2

**Formula:**

$C_{24}H_{25}ClN_2O_2$

**Pathway:**

GPCR/G Protein

**Target:**

CaSR

**Purity / Grade:**

>98%

**Solubility:**

10 mM in DMSO

**Alternative Names:**

SB 262470A

**Observed Molecular Weight:**

408.92

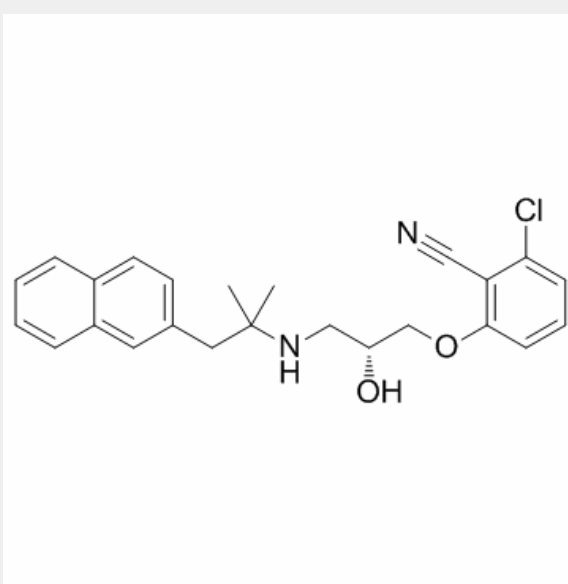
## Product Description

NPS-2143 is a novel potent and selective antagonist of **Ca<sup>2+</sup> receptor** with **IC<sub>50</sub>** of 43 nM.

IC50 & Target: IC50: 43 nM (Ca<sup>2+</sup> receptor)

**In Vitro:** NPS-2143 blocks increases in cytoplasmic Ca<sup>2+</sup> concentrations with IC<sub>50</sub> of 43 nM elicited by activating the Ca<sup>2+</sup> receptor in HEK 293 cells expressing the human Ca<sup>2+</sup> receptor. NPS-2143 stimulates parathyroid hormone (PTH) secretion from bovine parathyroid cells with EC<sub>50</sub> of 41 nM. Moreover, NPS 214 also blocks the inhibitory effects of calcimimetic NPS R-467 on PTH secretion from bovine parathyroid cells and the inhibitory effects of extracellular Ca<sup>2+</sup> on isoproterenol-stimulated increases in cyclic AMP formation<sup>[1]</sup>. In HEK-293 cells transiently expressing hCaSRs, NPS-2143 significantly suppresses the kokumi taste by effectively inhibiting the activity of both GSH and γ-Glu-Val-Gly<sup>[3]</sup>. A recent study shows that NPS-2143 treatment suppresses low molecular weight fractions of azuki hydrolysate-induced cholecystokinin (CCK) secretion in CaSR-transfected HEK 293 cells<sup>[4]</sup>.

**In Vivo:** NPS-2143 results in a rapid 4- to 5-fold increase in plasma PTH levels and also a transient increase in plasma Ca<sup>2+</sup> levels<sup>[1]</sup> in rats. In normotensive rats, NPS-2143 administration (1 mg/kg, i.v.) markedly increases mean arterial blood pressure (MAP) in the presence of parathyroid glands<sup>[2]</sup>.



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!