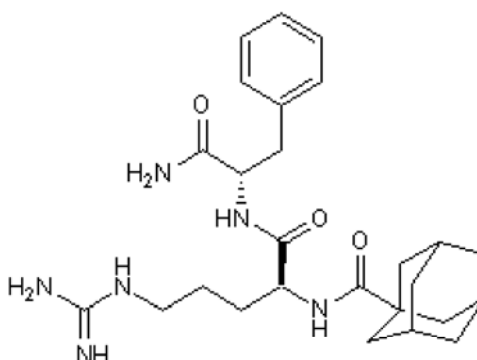


Product Name: RF 9
CAS Number: 876310-60-0

Catalog No.: 3672 **Batch No.:** 6

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₆H₃₈N₆O₃
Batch Molecular Weight: 482.62
Physical Appearance: White lyophilised solid
Solubility: DMSO to 10 mM
Storage: Store at -20°C
Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 97% purity
Mass Spectrum: Consistent with structure

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

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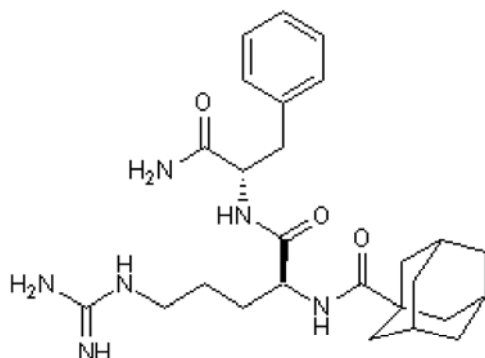
Description:

RF 9 is a selective NPFF receptor antagonist (K_i values are 58 and 75 nM at hNPFF₁ and hNPFF₂ receptors respectively). Displays selectivity over several related receptors including NPY Y₁ GPR10, GPR54, GPR103 and the opioid receptors. Blocks NPFF-induced hypothermia and increases in atrial blood pressure and heart rate, and prevents opioid-induced tolerance associated with hyperalgesia in vivo.

Physical and Chemical Properties:

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Batch Molecular Weight: 482.62
Physical Appearance: White lyophilised solid

Batch Molecular Structure:



Storage: Store at -20°C

Solubility & Usage Info:

DMSO to 10 mM
This product is supplied as a lyophilized solid and may be very hard to visualize. Solutions should be made by adding solvent directly to the vial. The vial should then be vortexed vigorously to ensure the product has completely dissolved.

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:

Fang et al (2008) Inhibition of neuropeptide FF (NPFF)-induced hypothermia and anti-morphine analgesia by RF9, a new selective NPFF receptors antagonist. *Regul.Peptides* **147** 45.

Wang et al (2008) Neuropeptide FF receptors antagonist, RF9, attenuates opioid-evoked hypothermia in mice. *Peptides* **29** 1183. PMID: 18406009.

Simonin et al (2006) RF9, a potent and selective neuropeptide FF receptor antagonist, prevents opioid-induced tolerance associated with hyperalgesia. *Proc.Natl.Acad.Sci.USA* **103** 466.

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