

UFP101 TFA

Chemical Properties

CAS No. :

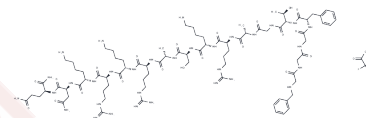
Formula: C82H138N32O21.XCF3COOH

Molecular Weight: 1908.18

Keep away from moisture

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Actual storage temperature shall be subject to the COA.



Biological Description

Description

UFP101 is a synthetic peptide that functions as an antagonist of the nociceptin receptor, demonstrating high affinity with a K_i of 0.06 nM in CHO cells expressing the human receptor. It exhibits selectivity for the nociceptin receptor over the κ -opioid receptor, with a K_i of 204 nM in CHO cells expressing the rat receptor. The compound effectively inhibits GTP γ S release from the nociceptin receptor in CHO cell membranes, with an EC_{50} of 1.86 nM. When administered intracerebroventricularly at a dose of 10 nmol/animal, UFP101 prolongs the latency to tail withdrawal in the tail-flick test in mice, indicating its potential as an analgesic. Additionally, at doses of 0.003, 0.03, and 0.3 mg/kg, UFP101 enhances survival in a sepsis mouse model induced by cecal ligation and puncture, suggesting potential therapeutic applications in sepsis management.

Solubility Information

Solubility

PBS pH 7.2: 10 mg/mL (5.24 mM), Sonication is recommended.
 DMF: 5 mg/mL (2.62 mM), Sonication is recommended.
 DMSO: 10 mg/mL (5.24 mM), Sonication is recommended.
 (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.5241 mL	2.6203 mL	5.2406 mL
5 mM	0.1048 mL	0.5241 mL	1.0481 mL
10 mM	0.0524 mL	0.262 mL	0.5241 mL
50 mM	0.0105 mL	0.0524 mL	0.1048 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

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