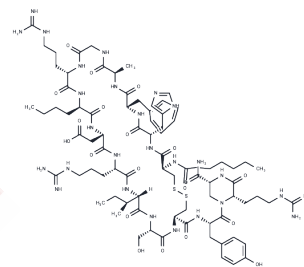


PL-3994

## Chemical Properties

CAS No. :	952295-80-6
Formula:	C82H127N27O20S2
Molecular Weight:	1875.19
Storage:	Keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year <small>Actual storage temperature shall be subject to the COA.</small>



## Biological Description

Description	PL-3994, a natriuretic peptide receptor-A (NPR-A) agonist resistant to neutral endopeptidase, functions as a bronchodilator, eliciting a concentration-dependent relaxation of pre-contracted guinea-pig trachea, evidenced by an IC50 of 42.7 nM [1].
In vitro	PL-3994 exhibits high binding affinity to recombinant NPR-As in human, canine, and rat models, with inhibition constants (K <sub>i</sub> ) of 1 nM, 41 nM, and 10 nM, respectively.
In vivo	Intratracheal administration of PL-3994 at doses ranging from 1 to 1000 mg/kg (i.t.; single dose) elicits a dose-dependent attenuation of bronchoconstriction triggered by aerosolized methacholine; this occurs without markedly impacting cardiovascular parameters [1]. Notably, PL-3994 exhibits substantial resistance to human neutral endopeptidase (hNEP) degradation, maintaining 92% integrity after 2 hours, in contrast to the swift metabolism of natural counterparts, ANP and CNP, which display less than or equal to 1% remaining after 2 hours [1].

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.5333 mL	2.6664 mL	5.3328 mL
5 mM	0.1067 mL	0.5333 mL	1.0666 mL
10 mM	0.0533 mL	0.2666 mL	0.5333 mL
50 mM	0.0107 mL	0.0533 mL	0.1067 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**

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