

## PA2-GNU7

## Chemical Properties

CAS No. :	2387505-19-1
Formula:	C150H276N50O37
Molecular Weight:	3372.17
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	PA2-GNU7 is an antimicrobial peptide (AMP) with potent antibacterial activity, demonstrating minimum inhibitory concentrations (MIC) of 2 $\mu$ M for <i>Pseudomonas aeruginosa</i> , 1 $\mu$ M for <i>Escherichia coli</i> , 2 $\mu$ M for <i>Salmonella</i> , 2 $\mu$ M for <i>Staphylococcus aureus</i> , and 8 $\mu$ M for <i>Candida albicans</i> . It rapidly and selectively kills <i>Pseudomonas aeruginosa</i> without affecting other symbiotic bacteria and significantly enhances the survival rate of mice infected with <i>Pseudomonas aeruginosa</i> . PA2-GNU7 has potential applications in researching and developing treatments for infections caused by multidrug-resistant <i>Pseudomonas aeruginosa</i> .
In vitro	PA2-GNU7 (21 h) demonstrates potent antibacterial activity, with minimum inhibitory concentrations (MIC) against <i>Pseudomonas aeruginosa</i> , <i>Escherichia coli</i> , <i>Salmonella</i> spp., <i>Staphylococcus aureus</i> , and <i>Candida albicans</i> at 2 $\mu$ M, 1 $\mu$ M, 2 $\mu$ M, 2 $\mu$ M, and 8 $\mu$ M, respectively. PA2-GNU7 (1 $\mu$ M) selectively eradicates <i>Pseudomonas aeruginosa</i> in a dual-species culture (1:1 <i>P. aeruginosa</i> and <i>E. coli</i> or <i>Salmonella</i> ).
In vivo	Administered intraperitoneally at a dose of PA2-GNU7 (15-25 mg/kg) 30 minutes post-infection, significantly enhances the survival rate of BALB/c mice infected with <i>Pseudomonas aeruginosa</i> .

## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.2965 mL	1.4827 mL	2.9654 mL
5 mM	0.0593 mL	0.2965 mL	0.5931 mL
10 mM	0.0297 mL	0.1483 mL	0.2965 mL
50 mM	0.0059 mL	0.0297 mL	0.0593 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.

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