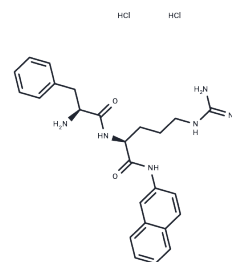


## PAβN dihydrochloride

## Chemical Properties

CAS No. :	100929-99-5
Formula:	C <sub>25</sub> H <sub>32</sub> Cl <sub>2</sub> N <sub>6</sub> O <sub>2</sub>
Molecular Weight:	519.47
Appearance:	no data available
Storage:	store at low temperature, keep away from moisture Powder: -20°C for 3 years   In solvent: -80°C for 1 year



## Biological Description

Description	PAβN dihydrochloride (MC-207,110 dihydrochloride) is an inhibitor of efflux pump.
Targets(IC50)	Antibacterial
In vitro	PAβN reduces the MICs in nine ciprofloxacin-resistant isolates, and in four of these, PAβN increases the susceptibility by twofold. Moreover, PAβN restores ciprofloxacin susceptibility in five of the ciprofloxacin-resistant isolates. In addition, clear effects of NMP on the ciprofloxacin MICs are seen for 20 of these ciprofloxacin-resistant isolates[2].

## Solubility Information

Solubility	H <sub>2</sub> O: 14.29 mg/mL (27.51 mM), Sonication is recommended. DMSO: 95 mg/mL (182.88 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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## Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.925 mL	9.6252 mL	19.2504 mL
5 mM	0.385 mL	1.925 mL	3.8501 mL
10 mM	0.1925 mL	0.9625 mL	1.925 mL
50 mM	0.0385 mL	0.1925 mL	0.385 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.

### Reference

- Lomovskaya O, et al. Identification and characterization of inhibitors of multidrug resistance efflux pumps in *Pseudomonas aeruginosa*: novel agents for combination therapy. *Antimicrob Agents Chemother*. 2001 Jan;45(1): 105-16.
- Liu C, Wang L, Wang P, et al. The Mechanism of Tigecycline Resistance in *Acinetobacter baumannii* Revealed by Proteomic and Genomic Analysis. *International Journal of Molecular Sciences*. 2023, 24(10): 8652.
- Kurinčič M, et al. Effects of efflux pump inhibitors on erythromycin, ciprofloxacin, and tetracycline resistance in *Campylobacter* spp. isolates. *Microb Drug Resist*. 2012 Oct;18(5):492-501.
- Lamers RP, et al. The efflux inhibitor phenylalanine-arginine beta-naphthylamide (PAβN) permeabilizes the outer membrane of gram-negative bacteria. *PLoS One*. 2013;8(3):e60666.

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