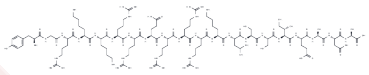
Data Sheet (Cat.No.T35924)

TargetMol

Tat-NR2Baa

Chemical Properties



CAS No. : 847829-41-8

Formula: C103H184N42O29

Molecular Weight: 2474.87

Storage: Keep away from moisture
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	Tat-NR2BAA is an inactive control peptide of Tat-NR2B9c. It shares a similar sequence with Tat-NR2B9c, but possesses a double-point mutation in the COOH terminal tSXV motif. This mutation renders Tat-NR2BAA unable to bind PSD-95. Tat-NR2B9c, on the other hand, is a membrane-permeable peptide that interferes with PSD-95/NMDAR binding. This interference leads to the decoupling of NR2B- and/or NR2A-type NMDARs from PSD-95[1][2].
Targets(IC50)	NO Synthase,iGluR
In vitro	Tat-NR2BAA (125 ng; 20 mins) does not affect the interaction between PSD-95 and NR2B subunits. Conversely, this interaction is significantly reduced in rats pre-treated with Tat-NR2B9c in lumbar dorsal horn tissue, as shown by coimmunoprecipitation results [1]. Tat-NR2BAA (125 ng or 1.25 μg; 20 minutes before tissue collection) does not influence these interactions, even at doses 100 times greater than the effective Tat-NR2B9c [1]. Additionally, Tat-NR2BAA (1 μM; pre-treatment 1 hour) is used as a control in a co-immunoprecipitation assay where Tat-NR2B9c (1 μM) specifically disrupts the NR2B/PSD-95 interaction. This disruption indicates greater sensitivity of NR2B/PSD-95 coupling compared to NR2A/PSD-95 in hippocampal neurons, with Tat-NR2B9c causing a significant reduction in post-discharge, highlighting cellular hyperexcitability [2].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.4041 mL	2.0203 mL	4.0406 mL
5 mM	0.0808 mL	0.4041 mL	0.8081 mL
10 mM	0.0404 mL	0.202 mL	0.4041 mL
50 mM	0.0081 mL	0.0404 mL	0.0808 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.

Reference

Michelle Aarts, et al. Treatment of Ischemic Brain Damage by Perturbing NMDA Receptor- PSD-95 Protein Interactions. Science