

NAB815

Chemical Properties

CAS No. : 1969250-99-4

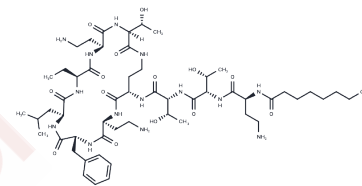
Formula: C55H94N14O14

Molecular Weight: 1175.42

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	NAB815 is a specific inhibitor of Stx2a (Kd= 0.01 μ M)/TLR4 interactions. It inhibits the interaction between neutrophils and Stx2a with an IC50 of 0.057 μ g/mL. NAB815 also prevents the formation of extracellular vesicles (EV) containing Stx2 from leukocytes and platelets, reducing its toxicity in cells (Vero cells) and in animal models (CD-1 mice). Additionally, NAB815 decreases the bacterial load in the kidneys, urine, and bladder of mice infected with Escherichia coli. It is applicable for research in hemolytic uremic syndrome (HUS).
Targets(IC50)	Antibacterial,TLR
In vitro	NAB815, at a concentration of 1 nM for 4 hours, can inhibit the formation of leukocyte/platelet aggregates induced by Stx2a. When used at concentrations of 0.01-0.1 μ g/mL for 4 hours, it shows a slight effect on human leukocyte viability but none on erythrocytes. Additionally, it suppresses the formation of pathological endothelial vesicles (EVs) derived from platelets and leukocytes containing Stx2a, and reduces the recruitment of complement factors in EVs induced by Stx2. At 0.01 μ g/mL, NAB815 protects Vero cells from the toxicity caused by EVs triggered by Stx2a.
In vivo	NAB815, when administered intravenously at a concentration of 0.01 μ g/mL in a volume of 100 μ L once, provides protection to CD-1 mice against free Stx2a. Additionally, a single intravenous dose of NAB815 (0.01 μ g/mL, 300 μ L) shields humanized EVs CD-1 mice from EV-associated Stx2a. Furthermore, NAB815 at 0.5-2 mg/L, injected subcutaneously at 0.2 mL twice daily for three consecutive days, reduces the bacterial load in the kidneys, urine, and bladder of female OF-1 mice with E. coli infections.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.8508 mL	4.2538 mL	8.5076 mL
5 mM	0.1702 mL	0.8508 mL	1.7015 mL
10 mM	0.0851 mL	0.4254 mL	0.8508 mL
50 mM	0.017 mL	0.0851 mL	0.1702 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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