

Tat-Gap 19 TFA

Chemical Properties

CAS No. :

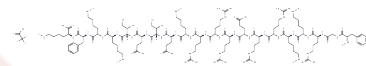
Formula: C119H212N46O26.XCF3COOH

Molecular Weight: 2703.25

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

Tat-Gap 19, a peptide inhibitor of connexin43 (Cx43) hemichannels, is derived from the HIV-1 Tat protein transduction domain fused with a nine-amino acid sequence from Cx43 residues 128-136. This compound, at a concentration of 10 μ M, effectively suppresses glutamate-induced ATP release in primary rat hepatocytes, indicating inhibition of Cx43 hemichannel activity. Furthermore, Tat-Gap 19 demonstrates therapeutic potential by significantly reducing infarct volume in a mouse cerebral ischemia-reperfusion injury model following middle cerebral artery occlusion (MCAO) at a dosage of 25 mg/kg. Moreover, its intraperitoneal administration at 1 mg/kg per day ameliorates fibrosis and decreases the area of hepatic stellate cells, the precursors to myofibroblasts, expressing α -smooth muscle actin (α -SMA), in a model of thioacetamide-induced liver damage. Additionally, it enhances superoxide dismutase (SOD) activity in hepatic cells from the treated mice, indicating its antioxidative benefits.

Solubility Information

Solubility

H2O: Soluble
(< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.3699 mL	1.8496 mL	3.6993 mL
5 mM	0.074 mL	0.3699 mL	0.7399 mL
10 mM	0.037 mL	0.185 mL	0.3699 mL
50 mM	0.0074 mL	0.037 mL	0.074 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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