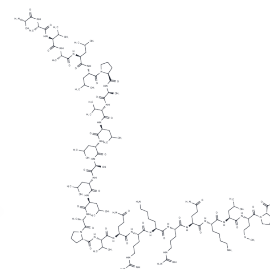


SN50

Chemical Properties

CAS No. : 213546-53-3
Formula: C129H230N36O29S
Molecular Weight: 2781.5
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	SN50 is a cell permeable NF- κ B translocation inhibitor.
Targets(IC50)	NF- κ B,MAPK,Glutathione Peroxidase,IL Receptor
In vitro	Compared with vehicle-treated groups,pretreatment with SN50 results in a significant reduction in amount of PI-positive cells at 12, 24, and 48 h time-point post TBI [1]. Local SN50 inhibits the activation of nuclear factor- κ B in local cells and reduces the occurrence of epithelial defects/ulcers during corneal healing. Myofibroblast generation, macrophage invasion, activity of matrix metalloproteinases, basement membrane destruction, and expression of cytokines are all decreased in treated corneas compared with controls[2]. Treating the human gastric cancer cells SGC7901 with SN50 could significantly enhance the effects of LY294002 on inducing cell death after 24 h[3]. SN50 can inhibit translocation of NF- κ B and production of inflammatory cytokines that are implicated in lipopolysaccharide (LPS)-induced lung injury[4].
In vivo	SN50 enhances motor function recovery from the first to the fourth day and shows a significant reduction in visuospatial learning latencies on the seventh and eighth days post-TBI, compared to the control group. Furthermore, SN50 pretreatment significantly decreases NF- κ B p65 and TNF- α protein levels between 6 to 48 hours post-TBI[1].

Solubility Information

Solubility	H2O: 40 mg/mL (14.38 mM),Sonication is recommended. DMSO: 80 mg/mL (28.76 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	0.3595 mL	1.7976 mL	3.5952 mL
5 mM	0.0719 mL	0.3595 mL	0.719 mL
10 mM	0.036 mL	0.1798 mL	0.3595 mL
50 mM	0.0072 mL	0.036 mL	0.0719 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

- Wu Y, et al. SN50 attenuates alveolar hypercoagulation and fibrinolysis inhibition in acute respiratory distress syndrome mice through inhibiting NF- κ B p65 translocation. *Respir Res.* 2020 May 27;21(1):130.
- Zhao K, et al. SN50 enhances the effects of LY294002 on cell death induction in gastric cancer cell line SGC7901. *Arch Med Sci.* 2013 Dec 30;9(6):990-8.
- Zhao K, et al. SN50 enhances the effects of LY294002 on cell death induction in gastric cancer cell line SGC7901. *Arch Med Sci.* 2013 Dec 30;9(6):990-8.
- Chian CF, et al. Inhibitor of nuclear factor- κ B, SN50, attenuates lipopolysaccharide-induced lung injury in an isolated and perfused rat lung model. *Transl Res.* 2014 Mar;163(3):211-20.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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