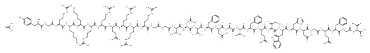
Data Sheet (Cat.No.T38861L)

TargetMol

Tat-beclin 1 acetate

Chemical Properties



CAS No. :

Formula: C166H255N57O47

Molecular Weight: 3801.15

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-beclin 1 acetate is a potent inducer of autophagy and interacts with the negative regulator of autophagy, GAPR-1. Tat-beclin 1 acetate decreases the accumulation of polyglutamine expansion protein aggregates and the replication of several pathogens (including HIV-1).
Targets(IC50)	HIV Protease,Autophagy
In vitro	Tat-beclin 1 acetate (10 μM; 2-4 hours post-infection) decreases the intracellular survival of L. monocytogenes in primary murine bone-marrow-derived macrophages (BMDMs)[1]. Tat-beclin 1 acetate (10, 30, 50 μM; 24 hours) induces autophagy and results in a dose-dependent decrease in amounts of p62, a selective autophagy substrate, and a dose-dependent conversion of the non-lipidated form of LC3, LC3-I, to the lipidated, autophagosome-associated form of LC3, LC3-II, in multiple cell lines and primary murine embryonic fibroblasts (MEFs)[1].
In vivo	Tat-beclin 1 acetate reduces mortality in mice infected with chikungunya (CHIKV) or West Nile virus (WNV). Tat-beclin 1 acetate (15 mg/kg; i.p.) induces autophagy in peripheral tissues in adult mice as well as in the central nervous system of neonatal mice[1].

Solubility Information

Solubility	DMSO: 45.00 mg/mL (11.84 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.2631 mL	1.3154 mL	2.6308 mL
5 mM	0.0526 mL	0.2631 mL	0.5262 mL
10 mM	0.0263 mL	0.1315 mL	0.2631 mL
50 mM	0.0053 mL	0.0263 mL	0.0526 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

Sanae Shoji-Kawata, et al. Identification of a Candidate Therapeutic Autophagy-Inducing Peptide. Nature. 2013 Feb 14;494(7436):201-6.