

Apelin-12 acetate

Chemical Properties

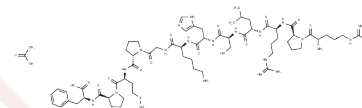
CAS No. :

Formula: C66H107N21O16S

Molecular Weight: 1482.75

Storage: Store at low temperature, 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	Apelin-12 acetate possesses a high affinity to orphan receptor APJ receptor. Apelin-12 acetate inhibits the JNK and p38 MAPK signaling pathway of the apoptosis-related MAPKs family, thus offering protection to neurons.
Targets(IC50)	Apelin receptor, JNK, p38 MAPK
In vivo	Apelin-12 acetate significantly improves the neurobehavioral score of the mice with ischemia-reperfusion injury and alleviates brain edema and damage to neurons. Apelin-12 acetate inhibits the morphological changes and apoptosis of neuronal cells in the ischemic penumbra of mice. Apelin-12 acetate downregulates the expression of Bax and caspase-3, inhibits the activity of caspase-3, and upregulates the expression of Bcl-2, an anti-apoptotic protein[2].

Solubility Information

Solubility	DMSO: 22.5 mg/mL (15.17 mM), Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	0.6744 mL	3.3721 mL	6.7442 mL
5 mM	0.1349 mL	0.6744 mL	1.3488 mL
10 mM	0.0674 mL	0.3372 mL	0.6744 mL
50 mM	0.0135 mL	0.0674 mL	0.1349 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

Yin C, et al. Adropin and apelin-12 efficiently predict metabolic syndrome in obese children. *Pediatr Diabetes*. 2020 Nov;21(7):1132-1139.

Liu DR, Hu W, Chen GZ. Apelin-12 exerts neuroprotective effect against ischemia-reperfusion injury by inhibiting JNK and P38MAPK signaling pathway in mouse. *Eur Rev Med Pharmacol Sci*. 2018 Jun;22(12):3888-3895.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

This product is for Research Use Only · Not for Human or Veterinary or Therapeutic Use

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481