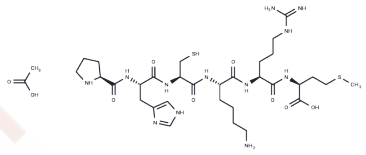
Data Sheet (Cat.No.TP1869L)

TargetMol

Antioxidant peptide A acetate

Chemical Properties



CAS No. :

Formula: C33H58N12O9S2

Molecular Weight: 831.02

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	Antioxidant peptide A acetate is a short peptide, which contains alternative aromatic or sulfur-containing amino acid.
Targets(IC50)	Others
In vitro	The effects of 10-100 μM of Antioxidant peptide A (Pep-A) concentrations are studied on the superoxide dismutase (SOD) enzyme activity. The enzyme activity decreases by 0.5 and 0.7-folds at 10 and 50 μM Antioxidant peptide A concentrations, respectively, and increases by 1.79-folds at 100 μM Antioxidant peptide A treatment, indicating that this concentration can be ideal for the treatment on Y79 a, RB cells. Furthermore, the Antioxidant peptide A can be involved in decreasing the ROS by increasing the antioxidant enzyme activity. A similar increase in the antioxidative enzyme levels in the presence of Hoki skin antioxidative peptide in hepatocarcinoma cells is attributed to the peptide's role in maintaining the redox balance in the cellular environment. Cell viability analysis results show that the Antioxidant peptide A shows no toxicity to cancerous (Y79) cells and non-cancerous cells even after 48 h of treatment. The Y79 RB cell viability ranges between 115 and 157 % and 111-126 % after 24 and 48 h of exposures with Antioxidant peptide A, respectively. The cancer cell death from the treatment of 10-100 μM GNPs concentration is studied[1].

Solubility Information

Solubility	DMSO: 10 mM,Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.2033 mL	6.0167 mL	12.0334 mL
5 mM	0.2407 mL	1.2033 mL	2.4067 mL
10 mM	0.1203 mL	0.6017 mL	1.2033 mL
50 mM	0.0241 mL	0.1203 mL	0.2407 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

Kalmodia S, et al. Bio-conjugation of antioxidant peptide on surface-modified gold nanoparticles: a novel approach to enhance the radical scavenging property in cancer cell. Cancer Nanotechnol. 2016;7:1.