

A β -IN-6

Chemical Properties

CAS No. :

Formula: C28H31N3O4

Molecular Weight: 473.56

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	A β -IN-6 is an orally active compound exhibiting anti-inflammatory, antioxidant, and anti-oligomeric activities, with significant implications for Alzheimer's disease (AD) research [1]. It effectively reduces the release of pro-inflammatory cytokines from microglia cells, promotes Nrf2 nuclear translocation, and impedes the formation of A β oligomers. Furthermore, A β -IN-6 demonstrates a stable neuroprotective effect by modulating redox-sensitive signaling pathways in an in vivo oxidative stress model.
Targets(IC50)	Beta Amyloid,Others,Nrf2
In vitro	A β -IN-6 (Compound 4; 1-20 μ M; 24 hours) significantly reduces microglial cell viability starting at a concentration of 5 μ M [1]. At concentrations above 2.5 μ M, A β -IN-6 (1.25-40 μ M; 24 hours) shows notable cytotoxicity in SH-SY5Y neuroblastoma cells [1]. A β -IN-6 (2.5 μ M; 3 hours) significantly induces Nrf2 nuclear translocation [1]. A β -IN-6 at 2.5 μ M significantly inhibits the increase in levels of two cytokines and NLRP3 mRNA induced by LPS [1]. With pre-treatment of 1 and 2.5 μ M for 1 hour followed by LPS stimulation for 24 hours, A β -IN-6 considerably reduces the release of TNF- α and IL-1 β induced by LPS [1]. Pre-treatment with A β -IN-6 (2.5 μ M; 24 hours) prior to exposure to tert-butyl hydrogen peroxide (t-BuOOH; 50 μ M for 30 minutes) reduces ROS formation by approximately 18% [1].
In vivo	A β -IN-6 (Compound 4; 10 μ M; added to standard food) effectively reduced the elevated levels of ROS in the muscles and brains of larvae with neurodegenerative disease (D-spastin loss-of-function model) back to the control levels observed in the Spastin fruit fly model [1].

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1117 mL	10.5583 mL	21.1166 mL
5 mM	0.4223 mL	2.1117 mL	4.2233 mL
10 mM	0.2112 mL	1.0558 mL	2.1117 mL
50 mM	0.0422 mL	0.2112 mL	0.4223 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

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