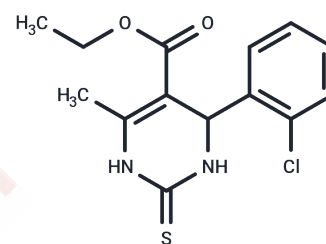


GSK3 β -IN-3

Chemical Properties

CAS No. :	301359-45-5
Formula:	C ₁₄ H ₁₅ ClN ₂ O ₂ S
Molecular Weight:	310.80
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	GSK3 β -IN-3 is an ATP-competitive GSK-3 β inhibitor (IC ₅₀ = 0.90 μ M) that demonstrates good blood-brain barrier permeability (P _e = 10.7 x 10 ⁻⁶ cm/s). It effectively reduces tau protein phosphorylation in the BR5706 strain and decreases A β aggregate deposition in the CL2006 strain, indicating its potential as a candidate for Alzheimer's disease (AD) research.
Targets(IC ₅₀)	Cytochromes P450,GSK-3
In vitro	GSK3 β -IN-3 (compound 66) effectively inhibits GSK-3 β with an IC ₅₀ of 0.90 μ M at concentrations ranging from 0.01 to 100 μ M. Additionally, GSK3 β -IN-3 exhibits ATP-competitive inhibition of the GSK-3 β enzyme at concentrations of 0-50 μ M.
In vivo	GSK3 β -IN-3 (compound 66), at a concentration of 10 μ M, reduces p-Tau (Ser396) levels in the Caenorhabditis elegans BR5706 strain. It also increases the number of flagella and reduces A β deposition in the C. elegans CL2006 strain. Furthermore, GSK3 β -IN-3 demonstrates good stability in human microsomes and shows potential for crossing the blood-brain barrier in PAMPA-BBB assays. It has a high plasma protein binding rate of 96.4%.

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.2175 mL	16.0875 mL	32.175 mL
5 mM	0.6435 mL	3.2175 mL	6.435 mL
10 mM	0.3218 mL	1.6088 mL	3.2175 mL
50 mM	0.0644 mL	0.3218 mL	0.6435 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

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

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