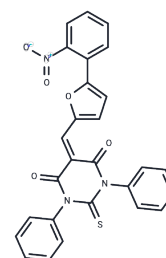


UCF 101

Chemical Properties

CAS No. : 313649-08-0
 Formula: C₂₇H₁₇N₃O₅S
 Molecular Weight: 495.51
 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	UCF 101 is a specific inhibitor of HtrA2 and reduces apoptosis in PC12 cells.
Targets(IC50)	Apoptosis
In vitro	PC12 cells treated with 60 μ M 6-OHDA for 24 h had significantly decreased cell viability compared to that of controls. A low concentration (2.5 μ M) of UCF 101 decreased the apoptosis rate of the PD cell model, but a high concentration (\geq 10 μ M) increased the apoptosis rate, compared to that of controls. 6-OHDA upregulated the expression of HtrA2, α -syn, CHOP, Grp78 and active caspase-3 and reduced the levels of TH and XIAP [3].
In vivo	Administration of UCF 101 shortly before reperfusion reduced postischemic myocardial apoptosis in a dose-dependent fashion, with the maximal protective effect observed at a dose of 1.5 μ mol/kg. This dose of UCF 101 (ie, 1.5 μ mol/kg) was used in all subsequent experiments. To further establish that inhibition of Omi/HtrA2 protease activity led to significant inhibition of apoptosis, the effect of UCF 101 on DNA ladder formation, a hallmark of apoptotic cell death, was determined. 30 minutes of ischemia followed by 3 hours of reperfusion resulted in significant DNA fragmentation, which was significantly reduced by treatment with UCF 101 before reperfusion[2].UCF 101 reduced the level of ERS and apoptosis in vivo. The ratio of p-GSK3 β (Tyr216 to Ser9) increased in PD rats[3].

Solubility Information

Solubility	DMSO: 12.5 mg/mL (25.23 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
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Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.0181 mL	10.0906 mL	20.1812 mL
5 mM	0.4036 mL	2.0181 mL	4.0362 mL
10 mM	0.2018 mL	1.0091 mL	2.0181 mL
50 mM	0.0404 mL	0.2018 mL	0.4036 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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