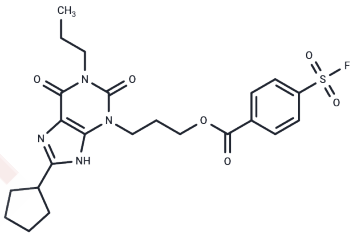
Data Sheet (Cat.No.T39039)

FSCPX

Chemical Properties



CAS No. :	156547-56-7
Formula:	C23H27FN4O6S
Molecular Weight:	506.55
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	FSCPX is a potent and selective irreversible antagonist of the A1 adenosine receptor (A1AR), exhibiting low nanomolar binding potency. It can effectively decrease the interstitial adenosine level in the guinea pig atrium, thereby modifying the effect of [NBTI], a nucleoside transport inhibitor.
Targets(IC50)	Adenosine Receptor
In vitro	FSCPX (2-20 μM ; 48 h) reverses the upregulation of HSP27 mRNA and protein in A1AR-overexpressing LLC-PK1 cells without an effect on the mRNA or protein for HSP70.[3] FSCPX (20 μM ; 48 h) attenuates protection from necrosis and apoptosis in A1AR-overexpressing LLC-PK1 cells.[3]

Solubility Information

Solubility	DMSO: 45 mg/mL (88.84 mM),Sonication and heating to 60℃ are recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+90% Corn Oil: 2 mg/mL (3.95 mM),Sonication is recommended. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	1.9741 mL	9.8707 mL	19.7414 mL
5 mM	0.3948 mL	1.9741 mL	3.9483 mL
10 mM	0.1974 mL	0.9871 mL	1.9741 mL
50 mM	0.0395 mL	0.1974 mL	0.3948 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

Beauglehole AR, et, al. New irreversible adenosine A(1) antagonists based on FSCPX. Bioorg Med Chem Lett. 2002 ; 12(21): 3179-3182.

Erdei T, et, al. FSCPX, a Chemical Widely Used as an Irreversible A_1 Adenosine Receptor Antagonist, Modifies the Effect of NBTI, a Nucleoside Transport Inhibitor, by Reducing the Interstitial Adenosine Level in the Guinea Pig Atrium. Molecules. 2018 ; 23(9):2186.

Lee HT, et, al. Renal tubule necrosis and apoptosis modulation by A1 adenosine receptor expression. Kidney Int. 2007 ; 71(12):1249-1261.