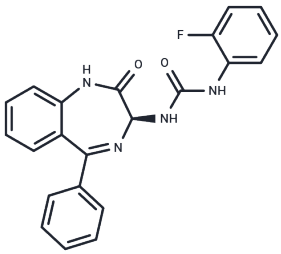
Data Sheet (Cat.No.T7353)

RSV604

Chemical Properties



CAS No. : 676128-63-5

Formula: C22H17FN4O2

Molecular Weight: 388.39

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	RSV604 ((S)-1-(2-Fluorophenyl)-3-(2-oxo-5-phenyl-2,3-dihydro-1H-benzo[e][1,4] diazepin-3-yl)urea) is an inhibitor of respiratory syncytial virus (RSV) that binds to RSV nucleoprotein (Kd = 1.31 μM)
Targets(IC50)	RSV
In vitro	RSV-604 increases viability of RSV-infected HEp-2 cells (EC50 = 0.86 μM) and inhibits RSV replication in human airway epithelial (HAE) cell monolayers following mucosal inoculation[1].
In vivo	RSV604 resistance mutations in the N protein. RSV604 engaged in two different MoAs in HeLa cells, inhibiting both RSV RNA synthesis and the infectivity of released virus. RSV604 did not inhibit viral RNA synthesis in the RSV subgenomic replicon cells or in the cell-free RNP assay, suggesting that it might act prior to viral replication complex formation. RSV604 did not alter N protein localization in the infected cells[2].

Solubility Information

Solubility	DMSO: 250 mg/mL (643.68 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 4 mg/mL (10.3 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	2.5747 mL	12.8737 mL	25.7473 mL
5 mM	0.5149 mL	2.5747 mL	5.1495 mL
10 mM	0.2575 mL	1.2874 mL	2.5747 mL
50 mM	0.0515 mL	0.2575 mL	0.5149 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

Challa S, Scott AD, Yuzhakov O,et al.Mechanism of Action for Respiratory Syncytial Virus Inhibitor RSV604[J]. Antimicrob Agents Chemother. 2015 Feb

RSV604, a Novel Inhibitor of Respiratory Syncytial Virus Replication[J]. Antimicrobial Agents and Chemotherapy, 2007, 51(9):3346-3353.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481