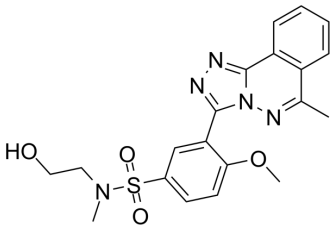
RSV-IN-1

Cat. No.:	HY-112673
CAS No.:	861139-16-4
Molecular Formula:	$C_{20}H_{21}N_5O_4S$
Molecular Weight:	427.48
Target:	RSV
Pathway:	Anti-infection
Storage:	Powder -20°C 3 years 4°C 2 years In solvent -80°C 6 months -20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (233.93 mM; Need ultrasonic)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.3393 mL	11.6965 mL	23.3929 mL
5 mM	0.4679 mL	2.3393 mL	4.6786 mL
10 mM	0.2339 mL	1.1696 mL	2.3393 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (5.85 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.08 mg/mL (4.87 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.08 mg/mL (4.87 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

RSV-IN-1 is a human respiratory syncytical virus (hRSV) inhibitor, with an IC_{50} of 0.11 μM.

IC_{50} & Target

IC50: 0.11μM (hRSV)[1].

In Vitro

The concentration of P13 that reduces the number of RSV plaques in HEp-2 cells by 50% (IC_{50}) is 0.11 μM. The concentration of P13 that reduces the viability of HEp-2 by 50% (CC_{50}) is 310 μM. Note that some cytotoxicity of P13 observed at 500 μM might be due to DMSO solvent. Hence, the selective index (CC_{50}/IC_{50}) values is 2818 for P13. Note that even at the relatively

high concentrations P13 does not completely block the development of RSV plaques. These escape plaques are of smaller size and of non-syncytial phenotype as compared to plaques formed in the absence of inhibitor[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Lundin A, et al. Two novel fusion inhibitors of human respiratory syncytial virus. Antiviral Res. 2010 Dec;88(3):317-24.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA