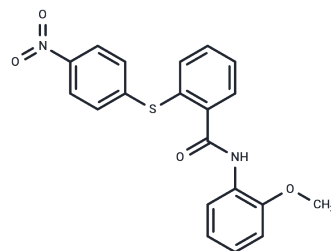


RN-18

Chemical Properties

CAS No. : 431980-38-0
Formula: C₂₀H₁₆N₂O₄S
Molecular Weight: 380.42
Appearance: no data available
Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year



Biological Description

Description	RN-18 is an inhibitor of HIV-1 viral infectivity factor (IC ₅₀ : 6 μM in nonpermissive H9 cells).
Targets(IC ₅₀)	HIV Protease
In vitro	RN-18 displays the greater potency (IC ₅₀ =4.5 μM in CEM cells) and specificity (IC ₅₀ >100 μM in MT4 cells) among the two compounds. RN-18 and RN-19 show effective antiviral activity in the nonpermissive H9 and CEM cells but not in MT4 or CEM-SS cells, confirming that the antiviral activity was Vif specific. RN-18 also exhibits antiviral activity in CEM-SS modified to stably express A3G but does not exhibit antiviral activity in the parental CEM-SS cell line. RN-18 increases cellular A3G levels in a Vif-dependent manner and increases A3G incorporation into virions without inhibiting general proteasome-mediated protein degradation. RN-18 enhances Vif degradation only in the presence of A3G, reduces viral infectivity by increasing A3G incorporation into virions, and enhances cytidine deamination of the viral genome. Reverse transcriptase activity in the nonpermissive H9 and CEM cells decreases substantially and in a dose-dependent manner in the presence of the inhibitor RN-18. RN-18 antagonizes the Vif function and inhibits HIV-1 replication only in the presence of A3G [1][2].

Solubility Information

Solubility	DMSO: 97 mg/mL (254.98 mM),Sonication is recommended. (< 1 mg/ml refers to the product slightly soluble or insoluble)
------------	--

A DRUG SCREENING EXPERT

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6287 mL	13.1434 mL	26.2867 mL
5 mM	0.5257 mL	2.6287 mL	5.2573 mL
10 mM	0.2629 mL	1.3143 mL	2.6287 mL
50 mM	0.0526 mL	0.2629 mL	0.5257 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.

Reference

Mohammed I, et al. SAR and Lead Optimization of an HIV-1 Vif-APOBEC3G Axis Inhibitor. ACS Med Chem Lett. 2012 Jun 14;3(6):465-469.

Inhibitor · Natural Compounds · Compound Libraries · Recombinant Proteins

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

Tel:781-999-4286 E_mail:info@targetmol.com Address:36 Washington Street,Wellesley Hills,MA 02481