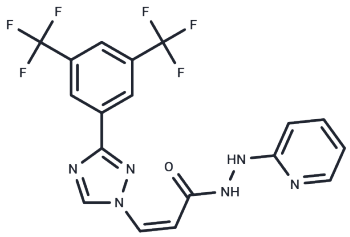
Data Sheet (Cat.No.T6123)

TargetMol
YOUR TARGET MOLECULES

Verdinexor

Chemical Properties



CAS No. : 1392136-43-4

Formula: C18H12F6N6O

Molecular Weight: 442.32

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	Verdinexor (KPT-335) (KPT-335), a specific XPO1/CRM1 inhibitor, are orally bioavailable.
Targets(IC50)	CRM1
In vitro	In a model of autosomal dominant polycystic kidney disease, intraperitoneal injection of Verdinexor (5 mg/kg) weakened cyst growth by inhibiting XPO1. Administering Verdinexor orally (25 mg/kg) twice daily reduced the incidence and mortality of lung disease associated with lethal influenza A virus type, primarily by decreasing the expression of pro-inflammatory cytokines in the lungs, which in turn reduced pulmonary viral titers, thereby exhibiting antiviral activity.
In vivo	In Jurkat,OCI-Ly3,OCI-Ly10,和CLBL1 cells,Verdinexor inhibited cell viability with IC50 of 0.3 nM, 2.1 nM, 41.8 nM, and 8.5 nM, respectively. In Primary Canine DLBCL Cells and CLBL1 expressed XPO1 and SINE, KPT-335 induces apoptosis. Verdinexorpotently inhibits a variety of influenza virus strains, including the H1N1 epidemic virus, the highly pathogenic H5N1 bird flu virus, and the recently emerging H7N9 strain.
Cell Research	Cell viability for lymphoid lines is determined by the MTS assay using CellTiter 96? AQueous One Solution Cell Proliferation Assay Kit. Briefly, for lymphoid cell lines, 5×104 cells (or 1×105 primary DLBCL cells) are cultured in 100 µL of complete medium in 96-well plates in the presence of SINE compounds. After 72 hours, 20 µL of MTS solution is added to each well and cells are incubated for another 4 hours before measuring absorbance at 490 nm using a Wallac Victor 1420 Multilabel Counter. The IC50 of SINE is calculated using Prism 6 software. For the non-lymphoid cell lines, 96 well plates are seeded in triplicate in 90 µL with 2500 cells/well of OSA16, 5000 cells/well of C2, and 2500 cells/well of 323610-3. Seeded plates are cultured overnight then treated the following day with 10 µL of KPT-214 in C10 media at concentrations of 0.0001, 0.01, 0.1, 1.0, and 10 µM. Plates are collected at 92 hours, centrifuged at 1300 rpm, and supernatant is removed by inverting plates on absorbent paper. Plates are then sealed and immediately placed at ?80°C for a minimum of 12 hours. Plates are then thawed and CyQUANT ?Cell Proliferation Assay is performed following the manufacturer's protocol. Briefly, 200 µL of the diluted working CyQUANT solution is added to each well and protected from light. Fluorescence is the measured using a SpectraMax M2 microplate reader at 480 nm excitation and 520 nm emission. Results are represented as percent of control, or plotted to calculate IC50 values at 92 hours.(Only for Reference)

Solubility Information

Solubility	DMSO: 82 mg/mL (185.4 mM), Ethanol: 9 mg/mL (20.3 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.2608 mL	11.304 mL	22.6081 mL
5 mM	0.4522 mL	2.2608 mL	4.5216 mL
10 mM	0.2261 mL	1.1304 mL	2.2608 mL
50 mM	0.0452 mL	0.2261 mL	0.4522 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

London CA, et al. PLoS One. 2014, 9(2), e87585.
Ou L, Wang X, Cheng S, et al. Verdinexor, a Selective Inhibitor of Nuclear Exportin 1, Inhibits the Proliferation and