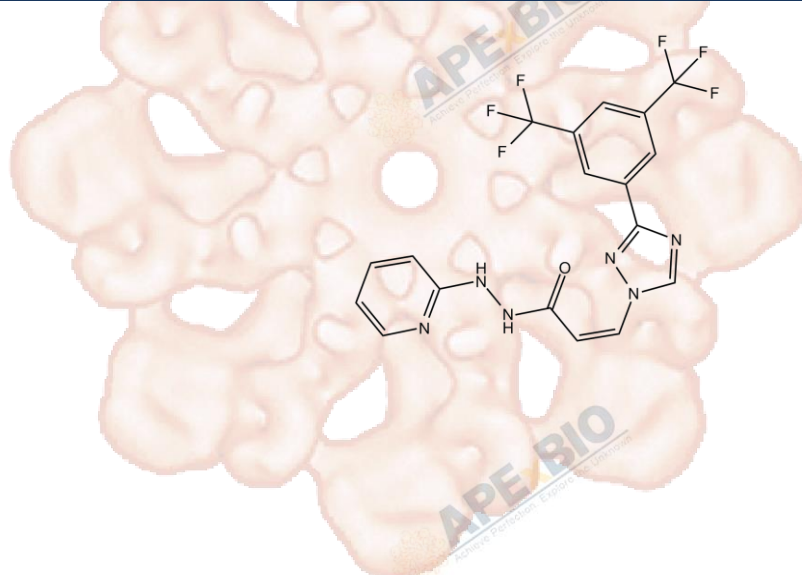


# Product Data Sheet

## Verdinexor (KPT-335)

<b>Cat. No.:</b>	B4889
<b>CAS No.:</b>	1392136-43-4
<b>Formula:</b>	C <sub>18</sub> H <sub>12</sub> F <sub>6</sub> N <sub>6</sub> O
<b>M.Wt:</b>	442.32
<b>Synonyms:</b>	
<b>Target:</b>	Cell Cycle/Checkpoint
<b>Pathway:</b>	CRM1
<b>Storage:</b>	Store at -20°C



### Solvent & Solubility

≥44.2 mg/mL in DMSO; insoluble in H<sub>2</sub>O; ≥2.31 mg/mL in EtOH with ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	<b>Concentration</b>			
	<b>1 mM</b>	2.2608 mL	11.3040 mL	22.6081 mL
	<b>5 mM</b>	0.4522 mL	2.2608 mL	4.5216 mL
	<b>10 mM</b>	0.2261 mL	1.1304 mL	2.2608 mL

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

### Biological Activity

Shortsummary

XPO1/CRM1 inhibitor

IC<sub>50</sub> & Target

In Vitro

#### Cell Viability Assay

Cell Line:	Human A549 cells
Preparation method:	The solubility of this compound in DMSO is > 10 mM. General tips for obtaining a higher concentration: Please warm the tube at 37 °C for 10 minutes and/or shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.
Reacting conditions:	2 h, 1 μM

	Applications:	Verdinexor (KPT-335) is a selective and orally available inhibitor of nuclear export. Verdinexor (KPT-335) prevents nuclear export of progeny influenza virus genome and inhibits the replication of multiple influenza viruses, including H1N1, H5N1 and H7N9 influenza virus. Verdinexor (KPT-335) disrupts XPO1-NEP binding, resulting in the blockage of nuclear vRNP export of several influenza A virus[1]. Besides, verdinexor (KPT-335) inhibits proliferation and induces apoptosis of canine melanoma cells[2].
In Vivo	<b>Animal experiment</b>	
	Animal models:	BALB/c female mice (6-8 week-old)
	Dosage form:	Oral gavage with 20 mg/kg every two days.
	Applications:	Verdinexor (KPT-335) is potent in inhibiting virus shedding, moderating leukocyte infiltration into the bronchoalveolar space, and reducing pulmonary pro-inflammatory cytokine expression in mice.
	Other notes:	Please test the solubility of all compounds indoor, and the actual solubility may slightly differ with the theoretical value. This is caused by an experimental system error and it is normal.

## Product Citations

See more customer validations on [www.apexbt.com](http://www.apexbt.com).

## References

- [1]. Perwitasari O, Johnson S, Yan X, et al. Verdinexor, a novel selective inhibitor of nuclear export, reduces influenza a virus replication in vitro and in vivo[J]. Journal of virology, 2014, 88(17): 10228-10243.
- [2]. Breit M N, Kisseberth W C, Bear M D, et al. Biologic activity of the novel orally bioavailable selective inhibitor of nuclear export (SINE) KPT-335 against canine melanoma cell lines[J]. BMC veterinary research, 2014, 10(1): 1.
- [3]. Perwitasari O, Johnson S, Yan X, et al. Antiviral Efficacy of Verdinexor In Vivo in Two Animal Models of Influenza A Virus Infection[J]. PloS one, 2016, 11(11): e0167221.

## Caution

**FOR RESEARCH PURPOSES ONLY.**

**NOT FOR HUMAN, VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.**

Specific storage and handling information for each product is indicated on the product datasheet. Most APEX BIO products are stable under the recommended conditions. Products are sometimes shipped at a temperature that differs from the recommended storage temperature. Short-term storage of many products are stable in the short-term at temperatures that differ from that required for long-term storage. We ensure that the product is shipped under conditions that will maintain the quality of the reagents. Upon receipt

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of the product, follow the storage recommendations on the product data sheet.



**APEx BIO Technology**

**[www.apexbt.com](http://www.apexbt.com)**

7505 Fannin street, Suite 410, Houston, TX 77054.

Tel: +1-832-696-8203 | Fax: +1-832-641-3177 | Email: [info@apexbt.com](mailto:info@apexbt.com)

