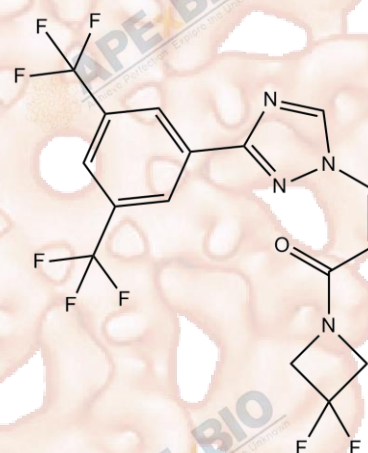


Product Data Sheet

KPT-276

Cat. No.:	B1463
CAS No.:	1421919-75-6
Formula:	C ₁₆ H ₁₀ F ₈ N ₄ O
M.Wt:	426.26
Synonyms:	
Target:	Cell Cycle/Checkpoint
Pathway:	CRM1
Storage:	Store at -20°C



Solvent & Solubility

insoluble in EtOH; insoluble in H₂O; ≥19.85 mg/mL in DMSO

In Vitro

	Solvent	Mass Concentration	1mg	5mg	10mg
			1mg	5mg	10mg
Preparing Stock Solutions	1 mM		2.3460 mL	11.7299 mL	23.4599 mL
	5 mM		0.4692 mL	2.3460 mL	4.6920 mL
	10 mM		0.2346 mL	1.1730 mL	2.3460 mL

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

Biological Activity

Shortsummary

inhibitor of nuclear export (SINE) and CRM1, orally bioavailable

IC₅₀ & Target

Cell Viability Assay

In Vitro

Cell Line:	Twelve human myeloma cell lines
Preparation method:	The solubility of this compound in DMSO is >19.85 mg/mL. 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:	24 h
	Applications:	In twelve HMCLs, treatment with KPT-276 ($\leq 1 \mu\text{M}$) for 72 h reduced cell viability with a median IC50 value of approximately 160 nM. KPT-276 treatment reduced c-Myc, CDC25A and BRD4 levels in both MM1.S and OCI-MY5. Treatment with KPT-276 for 24 h induced cell cycle arrest in MM1.S cells.
In Vivo	Animal experiment	
	Animal models:	Athymic NCr-nu/nu mice bearing MM1.S cells, Vk*MYC mouse model
	Dosage form:	Oral gavage, 150 mg/kg, 3 days/week for 3 weeks;
	Applications:	In a xenograft MM1.S MM model, the tumor volume significantly decreased after treatment with KPT-276 (12 days). KPT-276 reduced monoclonal spikes in the Vk*MYC transgenic MM mouse model, and inhibited tumor growth in a xenograft MM mouse model.
	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.

References

[1]. Schmidt J, Braggio E, Kortuem K M, et al. Genome-wide studies in multiple myeloma identify XPO1/CRM1 as a critical target validated using the selective nuclear export inhibitor KPT-276[J]. Leukemia, 2013, 27(12): 2357.

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

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