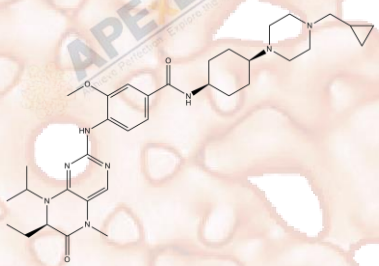
Product Data Sheet

BI6727 (Volasertib)



Cat. No.:	A8558
CAS No.:	755038-65-4
Formula:	C34H50N8O3
M.Wt:	618.83
Synonyms:	BI 6727; BI-6727
Target:	Cell Cycle/Checkpoint
Pathway:	PLK
Storage:	Store at -20°C

Solvent & Solubility

In Vitro

insoluble in H2O; ⩾10.31 mg/mL in DMSO; ⩾56.1 mg/mL in EtOH

Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	1.6160 mL	8.0798 mL	16.1595 mL
5 mM	0.3232 mL	1.6160 mL	3.2319 mL
10 mM	0.1616 mL	0.8080 mL	1.6160 mL

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

Biological Activity

Shortsummary	Plk inhibitor,highly potent
IC_{50} & Target	0.87 nM (Polo-like kinase)

In Vitro

Cell Viability Assay

Cell Line:	Human melanoma A375 and Hs 294T 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:	24 h, 10-100 nM

	Applications:	BI6727 (Volasertib) is a second generation small molecule Plk1 inhibitor and has been reported to be a promising agent for treatment of several cancers. BI6727 (Volasertib) inhibits growth, viability and induces apoptosis of melanoma cells.
In Vivo	**Animal experiment**	
	Animal models:	Patients aged ⩾ 18 years with locally advanced or metastatic urothelial cancer
	Dosage form:	BI6727 (Volasertib) was administered by 2-hour intravenous infusion at a dose of 300 mg once daily on day 1 of 3-week treatment cycles.
	Applications:	BI6727 (Volasertib) has an acceptable safety profile as a second-line treatment for advanced or metastatic urothelial cancer, but only modest antitumor activity for further evaluation as a monotherapy.
	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

1. Van der Feen DE, Kurakula K, et al. "Multicenter Preclinical Validation of BET Inhibition for the Treatment of Pulmonary Arterial Hypertension." Am J Respir Crit Care Med. 2019 May 1.PMID:31042405

2. Zheng DW, Xue YQ, et al. "Volasertib suppresses the growth of human hepatocellular carcinoma in vitro and in vivo." Am J Cancer Res. 2016 Nov 1;6(11):2476-2488.PMID:27904765

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References

[1]. Cholewa B D, Ndiaye M A, Huang W, et al. Small molecule inhibition of polo-like kinase 1 by volasertib (BI 6727) causes significant melanoma growth delay and regression in vivo[J]. Cancer Letters, 2017, 385: 179-187.

[2]. Stadler W M, Vaughn D J, Sonpavde G, et al. An open‐label, single‐arm, phase 2 trial of the polo‐like kinase inhibitor volasertib (BI 6727) in patients with locally advanced or metastatic urothelial cancer[J]. Cancer, 2014, 120(7): 976-982.

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 APExBIO 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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