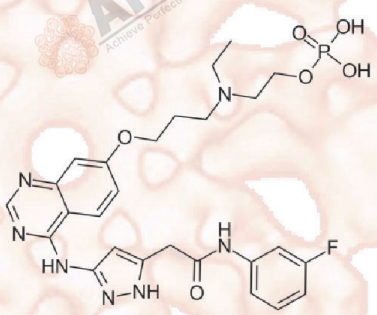
Product Data Sheet

AZD1152

Cat. No.:	A3214
CAS No.:	722543-31-9
Formula:	C26H31FN7O6P
M.Wt:	587.54
Synonyms:	AZD-1152;AZD 1152
Target:	Chromatin/Epigenetics
Pathway:	Aurora Kinase
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H2O; insoluble in EtOH; ⩾5.88 mg/mL in DMSO

In Vitro — Preparing Stock Solutions

Mass / Solvent / Concentration	1mg	5mg	10mg
1 mM	1.7020 mL	8.5101 mL	17.0201 mL
5 mM	0.3404 mL	1.7020 mL	3.4040 mL
10 mM	0.1702 mL	0.8510 mL	1.7020 mL

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

Biological Activity

Shortsummary	Aurora B kinase inhibitor,highly potent and selective
IC_{50} & Target	

In Vitro

Cell Viability Assay

Cell Line:	Leukemia cells from patients, bone marrow mononuclear cells from healthy volunteers
Preparation method：	The solubility of this compound in DMSO is >5.9mg/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:	1-100 nM
	Applications:	AZD1152-HQPA (1-100 nM) induced growth arrest of a variety of types of leukemia cells with the IC50s of approximately 5, 12, and 8 nM for Philadelphia chromosome–positive ALL PALL-2, acute monocytic leukemia MOLM13, and biphenotypic leukemia MV4-11 cells, respectively. AZD1152 (3 μM, 3 hours) significantly decreased expression of the phosphorylated forms of histone H3 in freshly isolated leukemia cells. AZD1152 increased cell 4N/8N DNA content in a dose- and time-dependent manner in MOLM13 and PALL2 cells. AZD1152-HQPA treatment (1-10 nM) for 24 or 48 hours induced apoptosis in a dose-dependent manner.
In Vivo	**Animal experiment**	
	Animal models:	Female immune-deficient BALB/c nude mice xenografted with human MOLM13 cells
	Dosage form:	5 or 25 mg/kg, Intraperitoneal injection, 4 times a week or every another day,
	Applications:	AZD1152 (25 mg/kg) markedly suppressed the growth and weights of AZD1152-treated tumors.
	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. Oser MG, Fonseca R, et al. "Cells Lacking the RB1 Tumor Suppressor Gene are Hyperdependent on Aurora B Kinase for Survival." Cancer Discov. 2018 Oct 29. pii: CD-18-0389.PMID:30373918

See more customer validations on www.apexbt.com.

References

[1] Yang J, Ikezoe T, Nishioka C, et al. AZD1152, a novel and selective aurora B kinase inhibitor, induces growth arrest, apoptosis, and sensitization for tubulin depolymerizing agent or topoisomerase II inhibitor in human acute leukemia cells in vitro and in vivo[J]. Blood, 2007, 110(6): 2034-2040.

[2] Lee TX1, Packer MD, Huang J, Akhmametyeva EM, Kulp SK, Chen CS, Giovannini M, Jacob A, Welling DB, Chang LS. Growth inhibitory and anti-tumour activities of OSU-03012, a novel PDK-1 inhibitor, on vestibular schwannoma and malignant schwannoma cells. Eur J Cancer. 2009 Jun;45(9):1709-20.

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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