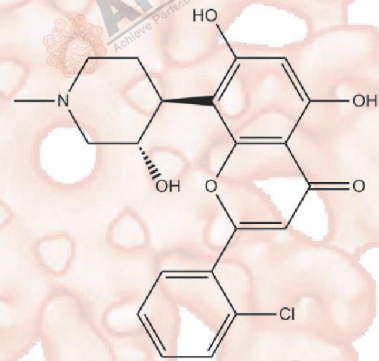


Product Data Sheet

Flavopiridol

Cat. No.:	A3417
CAS No.:	146426-40-6
Formula:	C ₂₁ H ₂₀ ClNO ₅
M.Wt:	401.85
Synonyms:	L868275; HMR-1275; Alvocidib
Target:	Cell Cycle/Checkpoint
Pathway:	Cyclin-Dependent Kinases
Storage:	Store at -20°C



Solvent & Solubility

insoluble in H₂O; ≥40.2 mg/mL in DMSO; ≥85.4 mg/mL in EtOH with gentle warming and ultrasonic

In Vitro

Preparing Stock Solutions	Solvent	Mass		
		1mg	5mg	10mg
	Concentration			
	1 mM	2.4885 mL	12.4425 mL	24.8849 mL
	5 mM	0.4977 mL	2.4885 mL	4.9770 mL
	10 mM	0.2488 mL	1.2442 mL	2.4885 mL

Please refer to the solubility information to select the appropriate solvent

Biological Activity

Shortsummary

Pan-cdk inhibitor

IC₅₀ & Target

In Vitro

Cell Viability Assay

Cell Line: 23 human tumor cells

Preparation method: This compound is soluble in DMSO. 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: 0.1 ng/mL ~ 10 µg/mL; 6 ~ 18 days

	Applications:	In 3 prostate cancer cell lines (PRXFI369, PC3MX and LNCaPX) and 1 melanoma cell line (MEXFI341), Flavopiridol potently inhibited colony formation, even at the concentration down to 0.1 ng/mL. At the concentrations between 10 and 100 ng/mL, Flavopiridol significantly inhibited colony formation of human bone marrow cells. For most of the human tumor cells, the inhibitory effect of Flavopiridol on colony formation was first observed at 10 ng/mL.
In Vivo	Animal experiment	
	Animal models:	Nude mice bearing PRXFI369 xenografts
	Dosage form:	10 mg/kg/day; p.o.
	Applications:	In tumor-bearing nude mice, Flavopiridol caused 12.5% deaths at the maximum tolerated dose (MTD). In nude mice bearing PRXFI369 xenografts, Flavopiridol at MTD resulted in an optimal T/C value of 33% and a growth delay of 30 days. However, at day 28, tumor volume increased slightly to 115%. Flavopiridol at the dose of 15 mg/kg/day was toxic, whereas at the dose of 5 mg/kg/day was inactive.
	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]. Drees M, Dengler WA, Roth T, Labonte H, Mayo J, Malspeis L, Grever M, Sausville EA, Fiebig HH. Flavopiridol (L86-8275): selective antitumor activity in vitro and activity in vivo for prostate carcinoma cells. Clin Cancer Res. 1997 Feb;3(2):273-9.

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



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