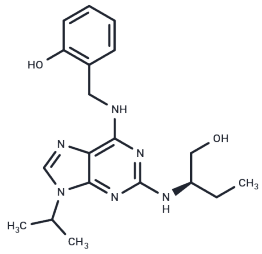
Data Sheet (Cat.No.T35696)

TargetMol

Olomoucine II

Chemical Properties



CAS No. :	500735-47-7
Formula:	C19H26N6O2
Molecular Weight:	370.45
Storage:	Store at low temperature Powder: -20°C for 3 years | In solvent: -80°C for 1 year Actual storage temperature shall be subject to the COA.

Biological Description

Description	Olomoucine II is a potent cyclin-dependent kinase inhibitor with IC50 values of 7.6, 0.1, 19.8, 0.45, and 0.06 μM for CDK1, CDK2, CDK4, CDK7, and CDK9, respectively. Olomoucine II demonstrates high selectivity over numerous other kinases while retaining measurable activity against ERK2 and ABCB1, allowing it to modulate multidrug resistance pathways. Olomoucine II suppresses proliferation across cancer cell lines regardless of p53 status and exhibits synergistic action with daunorubicin in ABCB1-expressing HCT-8 cells.Olomoucine II additionally inhibits replication of HSV-1, HSV-2, vaccinia virus, adenovirus 4, and human CMV, making Olomoucine II an important antiviral and anticancer research tool.
Targets(IC50)	ERK,CDK,P-gp
In vitro	Olomoucine II acts for 72 hours to inhibit the proliferation of various cells, with IC_{50} values for HOS, T98G, HBL100, BT474, MCF-7, HT-29, CCRF-CEM, BV173, and HL60 cells being 9.3, 9.2, 10.5, 13.6, 5.0, 10.8, 5.3, 2.7, and 16.3 μM, respectively [1].

Solubility Information

Solubility	DMSO: Soluble Methanol: Soluble (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6994 mL	13.4971 mL	26.9942 mL
5 mM	0.5399 mL	2.6994 mL	5.3988 mL
10 mM	0.2699 mL	1.3497 mL	2.6994 mL
50 mM	0.054 mL	0.2699 mL	0.5399 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

Krystof V, et al. Antiproliferative activity of olomoucine II, a novel 2,6,9-trisubstituted purine cyclin-dependent kinase inhibitor. Cell Mol Life Sci. 2005 Aug;62(15):1763-71.
Cihalova, D., Hofman, J., Ceckova, M., et al.Purvalanol A, olomoucine II and roscovitine inhibit ABCB1 transporter and synergistically potentiate cytotoxic effects of daunorubicin in vitroPLoS One8(12)e83467(2013)
Holcakova, J., Tomasec, P., Bugert, J.J., et al.The inhibitor of cyclin-dependent kinases, olomoucine II, exhibits potent antiviral propertiesAntivir. Chem. Chemother.20(3)133-142(2010)

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