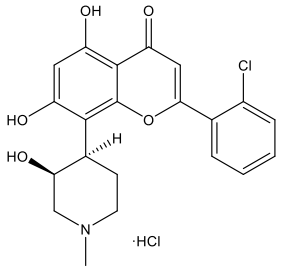
Catalog # 10-3063
Flavopiridol HCl

CAS# 131740-09-5

3-(3-Chlorophenyl)-5,7-dihydroxy-8-[(3S,4R)-3-hydroxy-1-methyl-4-piperidinyl]-4H-1-benzopyran-4-one, hydrochloride

L 86-8275; Alvocidib; NSC-649890

Lot # X106831



Cyclin-dependent kinase (CDK) inhibitor that causes cell cycle arrest at G_1 and G_2 phase.[1] Potentiates (100-200 nM) PMA-induced apoptosis in HL-60 and U937 cells.[2] Potentiates the effects of topoisomerase I inhibitors by suppressing Rad51 expression in a p53-dependent manner.[3] Displays potent antiviral activity against HIV-1 and HSV-1 *in vitro.*[4]

1) Kaur *et al*. (1992), *Growth inhibition with reversible cell cycle arrest of carcinoma cells by flavone L86-8275*; J. Natl. Cancer Inst., **84** 1736
2) Cartee *et al*. (2002), *Synergistic induction of apoptosis in human myeloid leukemia cells by phorbol 12-myristate 13-acetate and flavopiridol proceeds via activation of both the intrinsic and tumor necrosis factor-mediated extrinsic cell death pathways*; Mol. Pharmacol., **61** 1313
3) Ambrosini *et al*. (2008), *The cyclin-dependent kinase inhibitor flavopiridol potentiates the effects of topoisomerase I poisons by suppressing Rad51 expression in a p53-dependent manner*; Cancer Res. **68** 2312
4) Schang *et al*. (2004), *Effects of pharmacological cyclin-dependent kinase inhibitors on viral transcription and replication*; Biochim. Biophys. Acta, **1697** 197

PHYSICAL DATA

Molecular Weight:	438.30
Molecular Formula:	$C_{21}H_{20}ClNO_5$ • HCl
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	DMSO (up to 40 mg/ml), or Water (up to 40 mg/ml)
Physical Description:	Light yellow solid
Storage and Stability:	Store as supplied, desiccated at -20°C for up to 2 years from the date of purchase. Solutions in DMSO or distilled water may be stored at -20°C for up to 1 month.

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