

Flavopiridol (Hydrochloride)

Catalog No: tcsc0306



Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g



Specifications

CAS No:

131740-09-5

Formula:

$C_{21}H_{21}Cl_2NO_5$

Pathway:

Cell Cycle/DNA Damage;Autophagy

Target:

CDK;Autophagy

Purity / Grade:

>98%

Solubility:

H₂O : ≥ 20 mg/mL (45.63 mM)

Alternative Names:

HL 275;NSC 649890;MDL 107826A;FLAVOPIRIDOL HCL;Alvocidib Hydrochloride

Observed Molecular Weight:

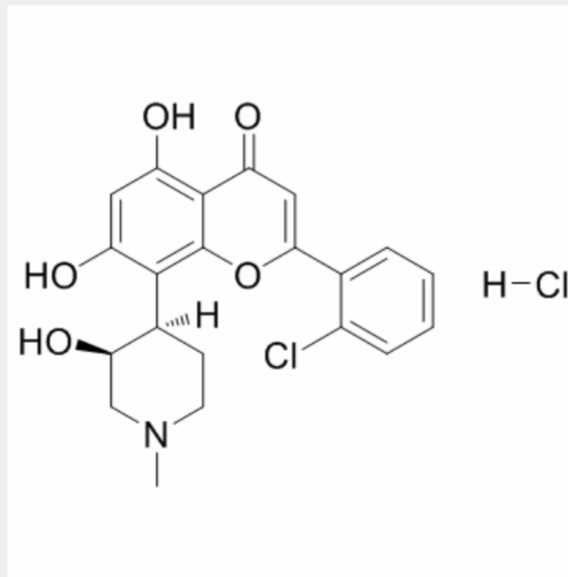
438.3

Product Description

Flavopiridol Hydrochloride is a broad inhibitor of **CDK**, competing with ATP to inhibit CDKs including CDK1, CDK2, CDK4 with **IC₅₀s** of 30, 170, 100 nM, respectively.

IC50 & Target: IC50: 30 nM (CDK1), 170 nM (CDK2), 100 nM (CDK4)^[3]

In Vitro: Flavopiridol (2 μM) robustly induces a distinct pattern of ER stress in CLL cells that contributes to cell death through IRE1-mediated activation of ASK1 and possibly downstream caspases^[1]. Flavopiridol results in potent upregulation of a number of PRGs in treatments lasting 4-24 h. Flavopiridol has an immediate and long-term effect on the expression of several PRGs. In serum starved cells re-stimulated with serum, flavopiridol also inhibits the expression of these genes, but subsequently, JUNB, GADD45B and EGR1 are upregulated in the presence of flavopiridol^[2].



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