Web: www.taiclone.com
Tel: +886-2-2735-9682
Email: order@taiclone.com

Flavopiridol

Catalog No: tcsc0018

Available Sizes

Size: 5mg

Size: 10mg

Size: 50mg

Size: 100mg

Size: 200mg

Size: 500mg

Size: 1g

Specifications

CAS No:
146426-40-6

Formula:
$C_{21}H_{20}ClNO_5$

Pathway:
Cell Cycle/DNA Damage;Autophagy

Target:
CDK;Autophagy

Purity / Grade:
>98%

Solubility:
DMSO : 50 mg/mL (124.43 mM; Need ultrasonic)

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Alternative Names:
L868275; HMR-1275; Alvocidib

Observed Molecular Weight:
401.84

Product Description

Flavopiridol is a broad inhibitor of **CDK**, competing with ATP to inhibit CDKs including CDK1, CDK2, CDK4 with **IC_{50}**s 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 and 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].