

Flavopiridol HCl

货号: F1015

储存条件: 粉末-20°C可保存3年; 液体-80°C可保存12月。

产品描述

Flavopiridol Hydrochloride is the hydrochloride form of Flavopiridol. Flavopiridol (Alvocidib) is a pan CDK inhibitor with IC50 value of 30nM, 40nM, 20-40nM, 60nM, 875nM and 20nM for CDK1, 2, 4, 6, 7, 9 (measured by in vitro kinase assays), respectively. It can inhibit the whole cell cycle progression through a variety of mechanisms related to CDK inactivation including: 1. Inhibition of CDK4/6 with cyclin D leads to decreased level of pRb-p107 and p130, as well as inactivation of E2F and stop in G1 progression; 2. Inhibition of cdk2 accompanied with cyclin A or E leads to further decreased phosphorylation and inactivation of Rb, as well as inactivation of E2F, and results in retardation in cell cycle progression through the S-phase and accumulation in G1 and G2; 3. Inhibition of CDK1 accompanied with cyclin A or B leads to inhibition of activation of topoisomerase activators, of lamin proteoglycans histone 1 protein and chromatin condensation, as well as results in retardation in cell cycle progression through S-phase and accumulation in G2 phase; 4. Inhibition of cdk7 accompanied with cyclin H complexes leads to reduced activation of cdk's, such as CDK4 with cyclin D or CDK1 with cyclin B, and reduced activation of RNA polymerase; 5. Flavopiridol may directly influence expression of cyclin D1 and D3 or participate directly in the control of transcription and activation of RNA-polymerase. Flavopiridol is able to induce apoptosis of tumor cells, including leukemia cells, head and neck tumors, breast carcinomas and non-small cell lung carcinoma cell lines, as well as normal cells in vitro after 6-48h with concentration ranging in 0.1-0.4uM. Intraperitoneal treatment of 5mg/kg flavopiridol for 12 days showed antitumor activity in subcutaneous HN12 xenograft mice. Clinical studies of flavopiridol of treatment for advanced solid tumors, ALL, AML, CLL, CML, mantle cell lymphoma, multiple myeloma, non-Hodgkin and other lymphomas, advanced sarcomas, breast, esophageal, head and neck, kidney, ovarian, pancreatic, gastric carcinomas and NSCLC are undergoing.

产品信息

CAS号	131740-09-5
分子式	C ₂₁ H ₂₁ Cl ₂ N ₅ O ₅
分子量	438.30



别名	NSC 649890 HCl;HL-275;MDL-107826-A	
溶解度	DMSO	500.0 mg/mL (1140.8 mM) warming
	Water	89.0 mg/mL (203.1 mM) warming

