Imatinib

货号：I1190

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

Imatinib is a multiple target inhibitor with IC50 values of 100nM, 100nM, 38nM, 25nM and 25nM for PDGFR, c-kit, v-Abl, c-abl and bcr-abl (measured by in vitro enzyme assays), respectively, usually used for treatment of chronic myelogenous leukemia (CML). In cellular study showed that treatment with Imatinib for 90min could selectively inhibited the autophosphorylation of v-Abl at concentration>3μM in PB-3c cl. 15 cells, PDGF-BB-induced autophosphorylation of PDGFR at concentration>0.3μM in BALB/c 313 cells, steel factor–dependent phosphorylation of c-kit and steel factor-dependent activation of Akt at concentration>1μM in M-07e cells, as well as autophosphorylation of an activated mutant form of c-kit and c-kit–dependent activation of MAP kinase/AKT at concentration>0.1μM in HMC-1 cells. Consistent with this, Imatinib showed anti-proliferative effect on HMC-1 cells by 90%-95% at concentration ranging in 0.1μM-10μM, which may due to the abrogation by Imatinib of antiapoptotic effect of mutant c-kit activation. Intraperitoneal injection with Imatinib at dose of 50mg/kg once daily for 30 days suppressed tumor growth in BALB/c AMuLV and BALB/c 3T3 v-sis cells xenograft mice.

作用机制

Imatinib can bind with the ATP binding site of BCR/ABL tyrosine kinase, thus keeps BCR/ABL in an inactive form

产品信息

CAS 号	152459-95-5	
分子式	C29H31N7O	
分子量	493.60	
溶解度	DMSO	100.0 mg/mL(202.6 mM) warming
	Water	Insoluble