

PI 3-K inhibitor IX, PIK-90 - CAS 677338-12-4 - Calbiochem The PI 3-K inhibitor IX, PIK-90, also referenced under CAS 677338-12-4, controls the biological activity of PI 3-K. This small molecule/inhibitor is primarily used for Phosphorylation & Dephosphorylation applications.

Art. ID SAF-528117-5MG
Unit 1 x 5 mg
Deliverydetails No Dangerous Good

Description

A cell-permeable imidazoquinazoline compound that acts as a potent, reversible, and ATP-competitive inhibitor against all three classes of PI 3-K kinases (IC₅₀ = 11, 18, 47, 58, 64, 350, and 830 nM against p110alpha, p110gamma, PI 3-KC2alpha, p110delta, PI 3-KC2beta, p110beta, and hsVPS34, respectively), as well as several PIKKs (IC₅₀ = 13, 610, and 1050 nM against DNA-PK, ATM, and mTORC1, respectively) and PI 4-KIIIalpha (IC₅₀ = 830 nM), while exhibiting much reduced potency against PI 4-KIIbeta and ATR (IC₅₀ = 3.1 and 15 µM, respectively) and little or no activity toward PI 4-KIIalpha, PIPKs (IC₅₀ >100 µM), and a panel of 36 commonly studied protein kinases (<15% inhibition at 10 µM). Effectively suppresses insulin-stimulated phosphorylations of Akt and rpS6 in 3T3-L1 adipocytes and L6 myotubes in a dose-dependent manner in vitro (by >90% at 2.5 µM) and completely prevents insulin-induced blood glucose decline in mice in vivo (10 mg/ml, i.p.).

Text/Information	Analyte/Parameter	CAS number	Concentration/Value	Unit	Method	Source
	PIK-90	[677338-12-4]				