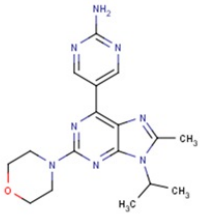
Product Name	:	VS-5584
Synonyms	:	VS5584; VS 5584; VS5584; SB2343
Cat No.	:	M17218
CAS Number	:	1246560-33-7
Molecular Formula	:	C17H22N8O
Formula Weight	:	354.41
Chemical Name	:	5-(9-isopropyl-8-methyl-2-morpholino-9H-purin-6-yl)pyrimidin-2-amine
Description	:	VS-5584, also known as SB2343, is a potent and selective inhibitor of both phosphatidylinositol 3 kinase (PI3K) and mammalian target of rapamycin (mTOR) kinase in the PI3K/mTOR signaling pathway, with potential antineoplastic activity. PI3K/mTOR kinase inhibitor VS-5584 inhibits mTOR kinase and all class I PI3K isoforms. Consequently, this disrupts phosphorylation of substrates downstream of PI3K and mTOR and may result in apoptosis and growth inhibition in susceptible tumor cells. Activation of the PI3K/mTOR pathway promotes cell growth, survival, and resistance to chemotherapy and radiotherapy.
Pathway	:	Immunology/Inflammation
Target	:	Amino Acids and Derivatives
Receptor	:	mTOR; PI3Kα; PI3Kβ; PI3Kγ; PI3Kδ
Solubility	:	DMSO : 33.33 mg/mL. 94.04 mM;
SMILES	:	CC(C)n1c(C)nc2c1nc(nc2c1cnc(N)nc1)N1CCOCC1
Storage	:	(-20℃)
Stability	:	≥ 2 years
Reference	:	



1. JA Pachter, et al. Molecular Targets and Cancer Therapeutics, 2012, abstract 405.