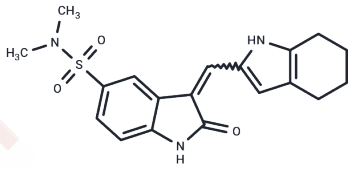
Data Sheet (Cat.No.T6997)

TargetMol

SU6656

Chemical Properties



CAS No. : 330161-87-0

Formula: C19H21N3O3S

Molecular Weight: 371.45

Appearance: no data available

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year

Biological Description

Description	SU 6656 is a selective inhibitor of Src family kinases, with IC50 of 280 nM, 20 nM, 130 nM, and 170 nM for Src, Yes, Lyn, and Fyn, respectively.
Targets(IC50)	FAK,Akt,Src
In vitro	In NIH 3T3 cells, SU 6656 inhibits the PDGF-stimulated S-phase induction with IC50 of 0.3-0.4 μM. SU 6656 also inhibits PDGF- and serum-mediated NIH 3T3 cell proliferation, as well as epidermal growth factor and colony-stimulating factor 1-stimulated DNA synthesis in normal and colony-stimulating factor 1 receptor transfected NIH 3T3 cells. SU6656 inhibits PDGF-stimulated c-Myc induction and ERK2 activation.[1] Pretreating Jurkat T-cells with SU 6656 leads to increased VSV-G luciferase activity.[2] SU 6656 impairs TGF-β-mediated upregulation of CTGF mRNA and protein in proximal epithelial HKC-8 cells, and also reduces CTGF expression in cells exposed to autocrine growth factors. SU 6656 interferes with Aurora kinase activity resulting in inhibition of cell division and formation multilobular nuclei.[3]
In vivo	SU 6656 markedly and dose-dependently attenuates mecamylamine-induced experimental nicotine withdrawal syndrome in mice measured in terms of WSS and anxiety score.[4] Once-daily administration of SU 6656 (1.5, 3, and 6 mg/kg, i.p.) markedly and dose-dependently attenuates the naloxone-induced morphine withdrawal syndrome.[5]
Kinase Assay	Biochemical kinase assays for IC50 determination and kinetic studies: IC50 measurements are made using poly-Glu-Tyr (4:1), or, in the case of Lck, poly-Lys-Tyr (4:1) as a peptide substrate. The divalent cation is 20 mM MgCl2 (in the case of Src, Fyn, Yes, Lyn, Csk, Frk, or Abl) or 10 mM MnCl2 (in the case of FGFR1, IGF1R, Lck, or Met). The ? nal ATP concentrations are as follows: Src, 10 μM; Fyn, 6 μM; Yes, 100 μM; Lyn, 2 μM; Csk, 10 μM; Frk, 10 μM; Abl, 4 μM; FGFR1, 10 μM; IGF1R, 2 μM; Lck, 2 μM; Met, 5 μM; PDGFR, 6 μM. IC50 measurements of PDGFRb autophosphorylation are determined on immunoprecipitated PDGFRb. Km values are calculated using the Eadie-Hofstee method.
Cell Research	HKC-8 cells are seeded at different cells densities (10,000 cells/cm2 and 50,000 cells/cm2) and cultured in the presence or absence of SU 6656 for 24 and 48 h. Bright ? eld pictures of cells are recorded by Olympus CK40 microscope using Leica DC Viewer software.(Only for Reference)

Solubility Information

Solubility	DMSO: 69 mg/mL (185.76 mM),Sonication is recommended. H2O: < 1 mg/mL (insoluble or slightly soluble), Ethanol: < 1 mg/mL (insoluble or slightly soluble), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.6922 mL	13.4608 mL	26.9215 mL
5 mM	0.5384 mL	2.6922 mL	5.3843 mL
10 mM	0.2692 mL	1.3461 mL	2.6922 mL
50 mM	0.0538 mL	0.2692 mL	0.5384 mL

Please select the appropriate solvent to prepare the stock solution, according to the solubility of the product in different solvents. Please use it as soon as possible.

Reference

Blake RA, et al. Mol Cell Biol. 2000, 20(23), 9018-9027.
McCarthy SD, et al. J Acquir Immune Defic Syndr.2014, 66(2), 118-126.
Cicha I, et al. Int J Biochem Cell Biol. 2014 Jan;46:39-48.
Rehni AK, et al. Nicotine Tob Res. 2012, 14(4), 407-414.
Rehni AK, et al. Behav Pharmacol. 2011, 22(2), doi: 10.1097/FBP.