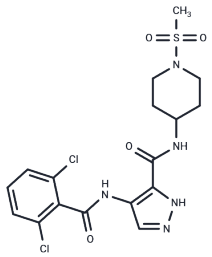
Data Sheet (Cat.No.TQ0068)

TargetMol

NVP-LCQ195

Chemical Properties



CAS No. : 902156-99-4

Formula: C17H19Cl2N5O4S

Molecular Weight: 460.33

Storage: Powder: -20°C for 3 years | In solvent: -80°C for 1 year
Actual storage temperature shall be subject to the COA.

Biological Description

Description	NVP-LCQ195 (LCQ-195) (AT9311) is a potent inhibitor of CDK1, CDK2, CDK3 and CDK5 (IC50: 1-42 nM).
Targets(IC50)	CDK
In vitro	NVP-LCQ195 induced cell cycle arrest and eventual apoptotic cell death of MM cells, even at sub-1 mol/l concentrations, spared non-malignant cells, and overcame the protection conferred to MM cells by stroma or cytokines of the bone marrow milieu. In MM cells, LCQ195 triggered decreased amplitude of transcriptional signatures associated with oncogenesis, drug resistance and stem cell renewal, including signatures of activation of key transcription factors for MM cells e.g. myc, HIF-1a, IRF4[1].
In vivo	Bortezomib-treated MM patients whose tumours had high baseline expression of genes suppressed by LCQ195 had significantly shorter progression-free and overall survival than those with low levels of these transcripts in their MM cells[1].

Solubility Information

Solubility	DMSO: 122.5 mg/mL (266.11 mM),Sonication is recommended. H2O: Insoluble, (< 1 mg/ml refers to the product slightly soluble or insoluble)
In vivo Formulation	10% DMSO+40% PEG300+5% Tween 80+45% Saline: 10 mg/mL (21.72 mM),Solution. 10% DMSO+90% Saline: < 10 mg/mL (21.72 mM),Lower concentrations may be soluble, but exact solubility limit is unknown. *Please add the solvents sequentially, clarifying the solution as much as possible before adding the next one. Dissolve by heating and/or sonication if necessary. Working solution is recommended to be prepared and used immediately. The formulation provided above is for reference purposes only. In vivo formulations may vary and should be modified based on specific experimental conditions.*

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	2.1724 mL	10.8618 mL	21.7235 mL
5 mM	0.4345 mL	2.1724 mL	4.3447 mL
10 mM	0.2172 mL	1.0862 mL	2.1724 mL
50 mM	0.0434 mL	0.2172 mL	0.4345 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.

Note: The dilution table applies only to solid products. For liquid products, please calculate the stock solution based on the stated concentration and/or density.

Reference

McMillin DW, Delmore J, Negri J et al. Molecular and cellular effects of multi-targeted cyclin-dependent kinase inhibition in myeloma: biological and clinical implications. Br J Haematol. 2011 Feb;152(4):420-32.