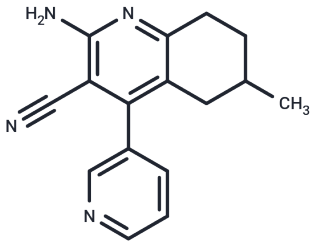
Data Sheet (Cat.No.T14778)

TargetMol
YOUR TARGET MOLECULES

BRD6989

Chemical Properties



CAS No. : 642008-81-9

Formula: C16H16N4

Molecular Weight: 264.33

Appearance: no data available

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

Biological Description

Description	BRD6989 is an analog of the natural product cortistatin A (dCA). Which inhibits CDK8 and upregulates IL-10. BRD6989 inhibits the kinase activity of recombinant CDK8 or CDK19 complexes. BRD6989 selectively binds a complex of CDK8 with an IC50 of ~200 nM.
Targets(IC50)	IL Receptor,CDK,Interleukin
In vitro	Pretreatment of BMDCs with BRD6989 (0-100 μM; for 48 hours) increases IL-10 production (EC50: ~1 μM). BRD6989 (0.6, 1.7, 5, 15 μM) suppresses phosphorylation of the STAT1 transactivation domain at Ser727 in IFNγ-stimulated BMDCs. BRD6989 (5 μM; 24 hours) enhances IL-10 production in activated human and murine macrophages and dendritic cells. BRD6989 (5 μM; ~2 hours) suppresses induction of STAT1–STAT2 activity and NF-κB activation to a varying degree after stimulation of BMDMs.

Solubility Information

Solubility	DMSO: 11 mg/mL (41.61 mM), (< 1 mg/ml refers to the product slightly soluble or insoluble)

Preparing Stock Solutions

	1mg	5mg	10mg
1 mM	3.7831 mL	18.9157 mL	37.8315 mL
5 mM	0.7566 mL	3.7831 mL	7.5663 mL
10 mM	0.3783 mL	1.8916 mL	3.7831 mL
50 mM	0.0757 mL	0.3783 mL	0.7566 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

Johannessen L, et al. Small-molecule studies identify CDK8 as a regulator of IL-10 in myeloid cells. Nat Chem Biol. 2017 Oct;13(10):1102-1108

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