

Data Sheet

 Product Name:
 BRD6989

 Cat. No.:
 CS-0087276

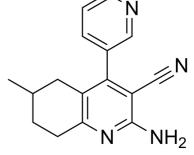
 CAS No.:
 642008-81-9

 Molecular Formula:
 C₁₆H₁₆N₄

 Molecular Weight:
 264.33

Target: CDK; Interleukin Related

Pathway: Cell Cycle/DNA Damage; Immunology/Inflammation
Solubility: DMSO: 25 mg/mL (94.58 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

BRD6989, an analog of the natural product cortistatin A (dCA), inhibits **CDK8** and upregulates **IL-10**. BRD6989 selectively binds a complex of CDK8 with an **IC**₅₀ of ~200 nM. BRD6989 inhibits the kinase activity of recombinant CDK8 or CDK19 complexes^[1]. **In Vitro:** Pretreatment of BMDCs with BRD6989 (0-100 μ M; for 48 hours) increases IL-10 production with an EC₅₀ of ~1 μ M^[1]. BRD6989 (0.6, 1.7, 5, 15 μ M) suppresses phosphorylation of the STAT1 transactivation domain at Ser727 in IFNy-stimulated BMDCs [1].

BRD6989 (5 μ M; ~2 hours) suppresses induction of STAT1–STAT2 activity and NF- κ B activation to a varying degree after stimulation of BMDMs^[1].

BRD6989 (5 µM; 24 hours) enhances IL-10 production in activated human and murine macrophages and dendritic cells^[1].

References:

[1]. 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

CAIndexNames:

3-Quinolinecarbonitrile, 2-amino-5,6,7,8-tetrahydro-6-methyl-4-(3-pyridinyl)-

SMILES:

N#CC1=C(C2=CC=CN=C2)C3=C(N=C1N)CCC(C)C3

Caution: Product has not been fully validated for medical applications. For research use only.

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