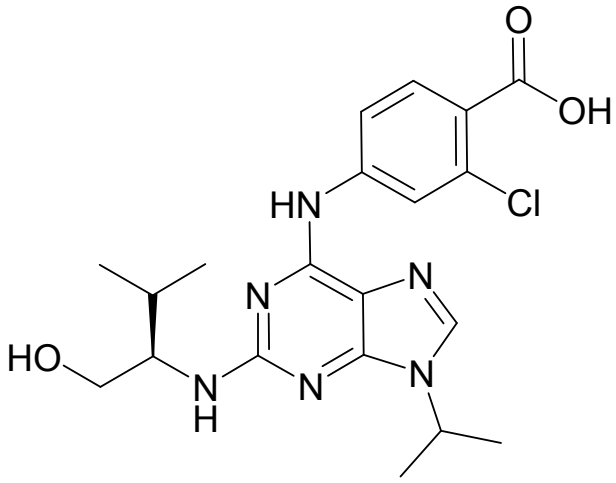
Purvalanol B

SYN-1070



(R)-2-chloro-4-(2-(1-hydroxy-3-methylbutan-2-ylamino)-9-isopropyl-9H-purin-6-ylamino)benzoic acid

CAS Registry No.: 212844-54-7

Smiles String:
CC(C)[C@H](CO)Nc1nc(c2c(n1)n(cn2)C(C)C)Nc3ccc(c(c3)Cl)C(=O)O

Molecular Weight: 432.9

Molecular Formula: C20H25ClN6O3

Lot Number: Refer to vial

1H-NMR: Available on request

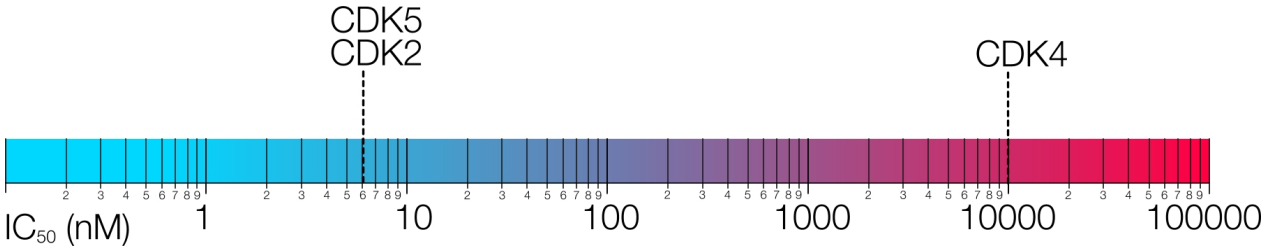
HPLC (Purity): > 95.0% @ 254 nm

ES-MS: Available on request

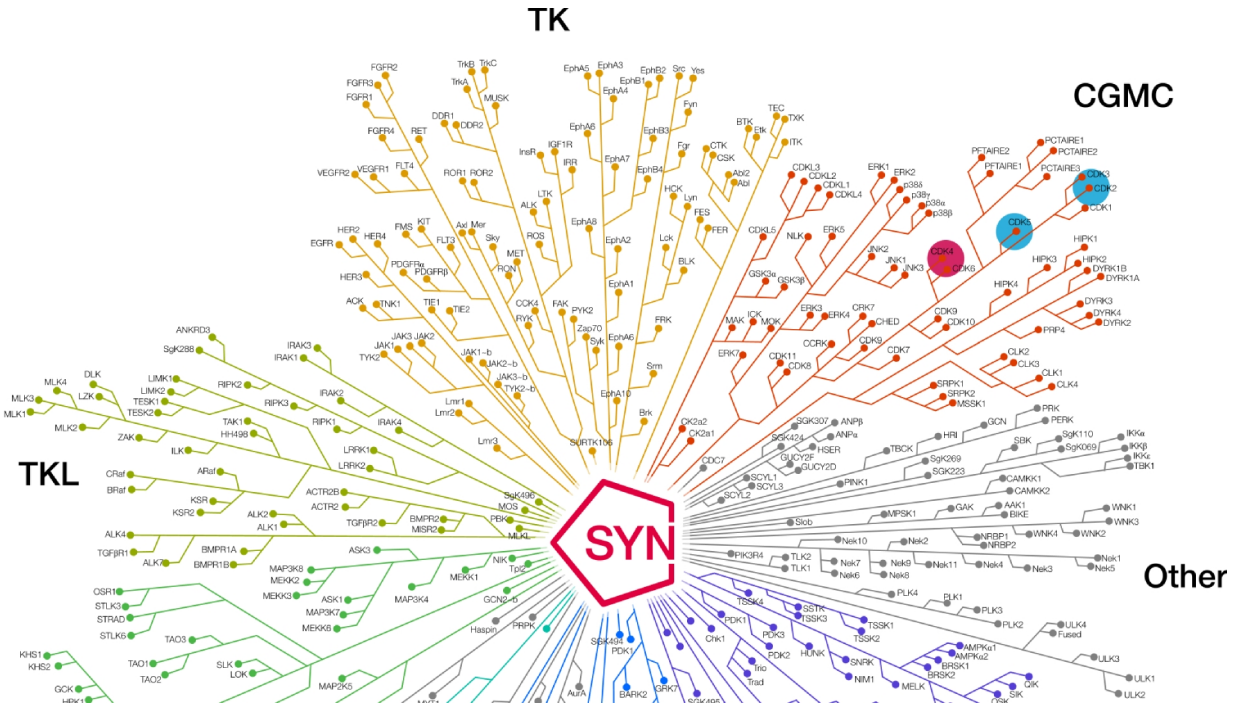
Description:

Purvalanol B is a cyclin-dependent kinase inhibitor with IC50 values of 6, 6, 9, > 10,000, and 6 nM for cdc2/cyclin B, cdk2/cyclin A, cdk2/cyclin E, cdk4/cyclin D1 and cdk5-p35 respectively. Purvalanol B has also been shown to have anti-proliferative properties, mediated by p42/p44 MAPK.

Biological Activity



Kinome Mapping



Shipping and Storage Temperature

Shipping:
Ambient

Storage:
2 years -20C, Powder 1 month, -4C in DMSO, More than one month -80C in DMSO

Solubility

DMSO 112mg/mL, Ethanol 4mg/mL

Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.4329	4.3290	8.6580	21.6450

References

1. Gray NS, Wodicka L, Thunnissen AM, Norman TC, Kwon S, Espinoza FH, Morgan DO, Barnes G, LeClerc S, Meijer L, Kim SH, Lockhart DJ, Schultz PG. Exploiting chemical libraries, structure, and genomics in the search for kinase inhibitors. Science. 1998 Jul 24;281(5376):533-8.

2. Gray N, Détivaud L, Doerig C, Meijer L. ATP-site directed inhibitors of cyclin-dependent kinases. Curr Med Chem. 1999 Sep;6(9):859-75.

3. Knockaert M, Lenormand P, Gray N, Schultz P, Pouysségur J, Meijer L. p42/p44 MAPKs are intracellular targets of the CDK inhibitor purvalanol. Oncogene. 2002 Sep 19;21(42):6413-24.

Ordering Information

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