

PRODUCT INFORMATION



CDK/CRK Inhibitor

Item No. 21195

CAS Registry No.: 784211-09-2

Formal Name: 1-(2,6-dichlorophenyl)-1,5-dihydro-6-[[4-(2-hydroxyethoxy)phenyl]methyl]-3-(1-methylethyl)-4H-pyrazolo[3,4-d]pyrimidin-4-one

Synonyms: Cdk7 Inhibitor IV, Cyclin-dependent kinase 7 Inhibitor IV, Cyclin-dependent kinase/CDK-related kinase Inhibitor, RGB-286147

MF: $C_{23}H_{22}Cl_2N_4O_3$

FW: 473.4

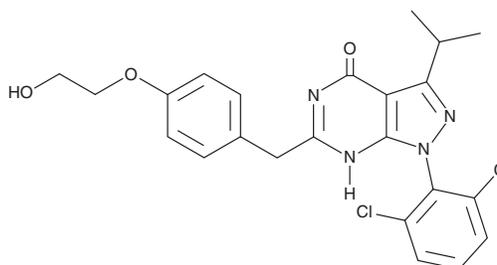
Purity: $\geq 98\%$

UV/Vis.: λ_{max} : 214 nm

Supplied as: A crystalline solid

Storage: $-20^{\circ}C$

Stability: ≥ 4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

CDK/CRK inhibitor is supplied as a crystalline solid. A stock solution may be made by dissolving the CDK/CRK inhibitor in the solvent of choice, which should be purged with an inert gas. CDK/CRK inhibitor is soluble in organic solvents such as DMSO, and dimethyl formamide (DMF). The solubility of CDK/CRK inhibitor in these solvents is approximately 30 mg/ml.

CDK/CRK inhibitor is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CDK/CRK inhibitor should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. CDK/CRK inhibitor has a solubility of approximately 0.2 mg/ml in a 1:4 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

CDK/CRK inhibitor is an inhibitor of cyclin-dependent kinases (CDK) and CDK-related kinases (CRK) with IC_{50} values ranging from 9-839 nM *in vitro*.¹ It is selective, exhibiting less than 20% inhibition of 60 non-CDK/CRK kinases, at a concentration of 1 μM . CDK/CRK inhibitor induces cell cycle arrest in the G_1 phase, endoreduplication, and apoptosis in HCT116 cells. It exhibits broad anti-tumor activity with an average GI_{50} value of <10 nM for 60 tumorigenic cell lines. It also inhibits growth of non-cycling HCT116 cells with an IC_{50} value of 40 nM.

Reference

1. Caligiuri, M., Becker, F.F., Murthi, K., *et al.* A proteome-wide CDK/CRK-specific kinase inhibitor promotes tumor cell death in the absence of cell cycle progression. *Chem. Biol.* **12**(10), 1103-1115 (2005).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 11/08/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM