PRODUCT INFORMATION



CCT020312

Item No. 36577

CAS Registry No.: 324759-76-4

Formal Name: 6-bromo-3-[5-(4-bromophenyl)-

1-[3-(diethylamino)-1-oxopropyl]-

4,5-dihydro-1H-pyrazol-3-yl]-4-

phenyl-2(1H)-quinolinone

MF: $C_{31}H_{30}Br_2N_4O_2$

FW: 650.4 **Purity:** ≥98% Supplied as: A solid Storage: -20°C Stability: ≥4 years

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

Laboratory Procedures

CCT020312 is supplied as a solid. A stock solution may be made by dissolving the CCT020312 in the solvent of choice, which should be purged with an inert gas. CCT020312 is soluble in the organic solvent DMSO.

Description

CCT020312 is an activator of eukaryotic translation initiation factor 2α kinase 3 (ΕΙF2ΑΚ3).¹ It increases phosphorylation of eIF2α at serine 51 in HT-29 colon carcinoma and MCF-7 breast cancer cells when used at a concentration of 10 µM, an effect not seen in cells transfected with EIF2AK3 siRNA. It reduces phosphorylation of the tumor suppressor retinoblastoma (Rb) protein in HT-29 cells (EC $_{50}$ = 5.1 μ M). CCT020312 (10 µM) rapidly reduces the level of cyclin D1 in HT-29 cells. It also inhibits the growth of HT-29 cells ($GI_{50} = 2.1 \,\mu\text{M}$).

Reference

1. Stockwell, S.R., Platt, G., Barrie, S.E., et al. Mechanism-based screen for G1/S checkpoint activators identifies a selective activator of EIF2AK3/PERK signalling. PLoS One 7(1), e28568 (2012).

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

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

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, 10/17/2022

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