

CDK1/CDC2 (Phospho-Thr14) Antibody

Catalog No: #11997

Package Size: #11997-1 50ul #11997-2 100ul

Orders: order@signalwayantibody.com

Support: tech@signalwayantibody.com

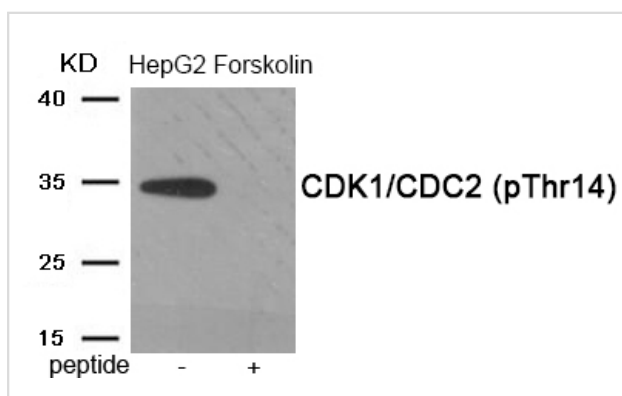
Description

Product Name	CDK1/CDC2 (Phospho-Thr14) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatography using non-phosphopeptide.
Applications	WB
Species Reactivity	Hu Ms Rt
Specificity	The antibody detects endogenous level of CDK1/CDC2 only when phosphorylated at threonine 14.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of threonine14(E-G-T(p)-Y-G) derived from Human CDK1/CDC2 .
Target Name	CDK1/CDC2
Modification	Phospho
Other Names	CDC28; CDC2A; CDK1; MPF; kinase Cdc2
Accession No.	Swiss-Prot#: P24941; NCBI Gene#: 1017; NCBI Protein#: NP_001277159.1
SDS-PAGE MW	34kd
Concentration	1.0mg/ml
Formulation	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C/1 year

Application Details

Western blotting: 1:500~1:1000

Images



Western blot analysis of extracts from HepG2 cells treated with Forskolin using Phospho-CDK1/CDC2 (Thr14) antibody #11997. The lane on the right is treated with the antigen-specific peptide.

Background

Serine/threonine-protein kinase involved in the control of the cell cycle; essential for meiosis, but dispensable for mitosis. Phosphorylates CTNNB1, USP37, p53/TP53, NPM1, CDK7, RB1, BRCA2, MYC, NPAT, EZH2. Interacts with cyclins A, B1, B3, D, or E. Triggers duplication of centrosomes and DNA. Acts at the G1-S transition to promote the E2F transcriptional program and the initiation of DNA synthesis, and modulates G2 progression; controls the timing of entry into mitosis/meiosis by controlling the subsequent activation of cyclin B/CDK1 by phosphorylation, and coordinates the activation of cyclin B/CDK1 at the centrosome and in the nucleus.

Sarkar S, Dey BK, Dutta A (2010) Mol Biol Cell 21, 2138-49

Shreeram S, Hee WK, Bulavin DV (2008) Mol Cell Biol 28, 7442-50

Mayya V, et al. (2006) Mol Cell Proteomics 5, 1146-57

Published Papers

el at., The Role and Mechanism of CRT0066101 as an Effective Drug for Treatment of Triple-Negative Breast Cancer. In Cell Physiol Biochem on 2019 by Liu Y, Wang Y, et al.. PMID:30845378, , (2019)

[PMID:30845378](#)

el at., Adhesion glycoprotein CD44 functions as an upstream regulator of a network connecting ERK, AKT and Hippo-YAP pathways in cancer progression. Oncotarget on 2015 Feb 20 by Shiyi Yu , Xiuxiu Cai et al..PMID: 25605020 , , (2015)

[PMID:25605020](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.