CDC2(Phospho-Tyr15) Antibody

Catalog No: #11244

Package Size: #11244-1 50ul #11244-2 100ul

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

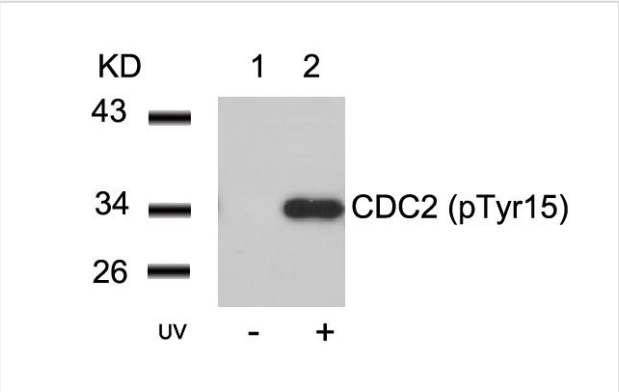
Product Name	CDC2(Phospho-Tyr15) Antibody
Host Species	Rabbit
Clonality	Polyclonal
Purification	Antibodies were produced by immunizing rabbits with synthetic phosphopeptide and KLH conjugates. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. Non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Applications	WB
Species Reactivity	Human;Mouse;Rat
Specificity	The antibody detects endogenous level of CDC2 only when phosphorylated at tyrosine 15.
Immunogen Type	Peptide-KLH
Immunogen Description	Peptide sequence around phosphorylation site of tyrosine 15 (G-T-Y(p)-G-V) derived from Human CDC2.
Conjugates	Unconjugated
Target Name	CDC2
Modification	Phospho
Other Names	CDC28; CDC2A; CDK1; Cyclin-dependent kinase 1;
Accession No.	Swiss-Prot: P06493NCBI Protein: NP_001163877.1
Concentration	1.0mg/ml
Formulation	Supplied at 1.0mg/mL in phosphate buffered saline (without Mg2+ and Ca2+), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Storage	Store at -20°C for long term preservation (recommended). Store at 4°C for short term use.

Application Details

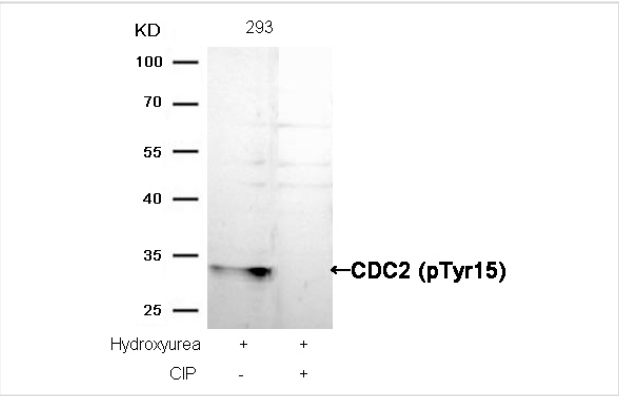
Predicted MW: 34kd

Western blotting: 1:500~1:1000

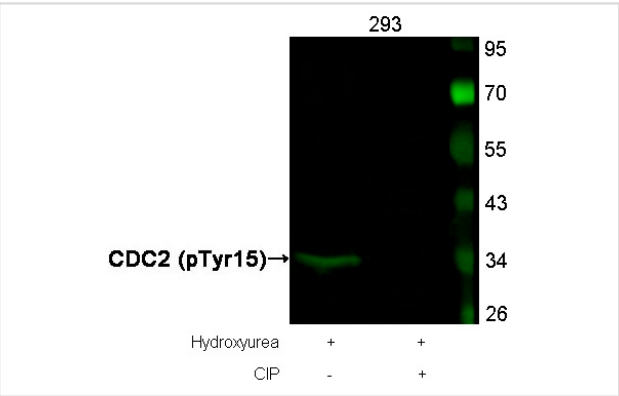
Images



Western blot analysis of extracts from Hela cells untreated(lane 1) or treated with UV(lane 2) using CDC2(Phospho-Tyr15) Antibody #11244.



Western blot analysis of extracts from 293 cells, treated with Hydroxyurea or calf intestinal phosphatase (CIP), using CDC2 (Phospho-Tyr15) Antibody #11244.



Western blot analysis of extracts from 293 cells, treated with Hydroxyurea or calf intestinal phosphatase (CIP), using CDC2 (Phospho-Tyr15) Antibody #11244.

Background

Plays a key role in the control of the eukaryotic cell cycle. It is required in higher cells for entry into S-phase and mitosis. p34 is a component of the kinase complex that phosphorylates the repetitive C-terminus of RNA polymerase II.
Y Gu, et al. (1992) EMBO J. 11(11): 3995

Published Papers

Philip M. KUBARA, Sophie KERN?EIS-GOLSTEYN, Aur?elie STUD?ENY el at., Human cells enter mitosis with damaged DNA after treatment with pharmacological concentrations of genotoxic agents., Biochem. J., 446:373η— C381(2012)

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Qi Yao, Hui Li, Bing-Qian Liu el at., SUMOylation-regulated Protein Phosphorylation, Evidence from Quantitative Phosphoproteomics Analyses., THE JOURNAL OF BIOLOGICAL CHEMISTRY, 286(31):27342-27349(2013)

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el at., Adaptive Gene Regulation of Pyruvate Dehydrogenase Kinase Isoenzyme 4 in Hepatotoxic Chemical-Induced Liver Injury and Its Stimulatory Potential for DNA Repair and Cell Proliferation.In J Recept Signal Transduct Res on 2011 Feb by Minori Dateki, Megumi Kunitomo,et al..PMID:21182459, , (2011)

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el at., SUMOylation-regulated protein phosphorylation, evidence from quantitative phosphoproteomics analyses.In J Biol Chem on 2011 Aug 5 by Qi Yao, Hui Li,et al..PMID:21685386, , (2011)

PMID:21685386

el at., Human cells enter mitosis with damaged DNA after treatment with pharmacological concentrations of genotoxic agents. In Biochem J on 2012 Sep 15 by Philip M Kubara, Sophie Kernθ is-Golsteyn, et al..PMID: 22686412, , (2012)

PMID:22686412

el at., Prolonged Mitotic Arrest Induced by Wee1 Inhibition Sensitizes Breast Cancer Cells to Paclitaxel.In Oncotarget on 2017 May 13 by Cody W Lewis , Zhigang Jin,et al..PMID: 29088738, , (2017)

PMID:29088738

el at., Pro-Apoptotic Effects of JDA-202, a Novel Natural Diterpenoid, on Esophageal Cancer Through Targeting Peroxiredoxin I.In Antioxid Redox Signal on 2017 Jul 10 by Xiao-Jing Shi , Lina Ding,et al..PMID: 27650197, , (2017)

PMID:27650197

el at., Jaridonin-induced G2/M Phase Arrest in Human Esophageal Cancer Cells Is Caused by Reactive Oxygen Species-Dependent Cdc2-tyr15 Phosphorylation via ATM-Chk1/2-Cdc25C Pathway .In Toxicol Appl Pharmacol on 2015 Jan 15 by Yong-Cheng Ma , Nan Su et al..PMID:25450480, , (2015)

PMID:25450480

el at., Critical reanalysis of the methods that discriminate the activity of CDK2 from CDK1.In Cell Cycle on 2016 May 2 by Nandini Sakurikar , Alan Eastman et al..PMID: 26986210, , (2016)

PMID:26986210

el at., Cytotoxic amounts of cisplatin induce either checkpoint adaptation or apoptosis in a concentrationı ζ• ependent manner in cancer cells. In Biol Cell on 2016 May by Lucy H Swift, Roy M Golsteynı ε t al..PMID:26871414, , (2016)

PMID:26871414

Layla Molina;David E. Williams;Raymond J. Andersen;Roy M. Golsteyn el at., Isolation of a natural product with anti-mitotic activity from a toxic Canadian prairie plant, , (2021)

PMID:34095597

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