Anti-cdc2 (p34) (MOUSE) Monoclonal Antibody - 200-301-160

Code: 200-301-160 **Size:** 100 µg

Product Description: Anti-cdc2 (p34) (MOUSE) Monoclonal Antibody - 200-301-160

Concentration: 1.0 mg/mL by UV absorbance at 280 nm

PhysicalState: Liquid (sterile filtered)

Label	Unconjugated
Host	Mouse
Gene Name	CDC2
Species Reactivity	human, mouse, rat
Buffer	0.02 M Potassium Phosphate, 0.5 M Sodium Chloride, pH 7.2
Stabilizer	None
Preservative	0.01% (w/v) Sodium Azide
Storage Condition	Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.
Synonyms	Cell Divsion Cycle 2 Protein antibody, Cyclin Dependent Kinase 1 antibody, DKFZp686L20222 antibody, MGC111195 antibody, p34 antibody, p34 Cdk1 antibody, p34 protein kinase antibody
Application Note	This antibody is suitable for immunohistochemistry immunoprecipitation (as active kinase), and immunoblotting. The antibody detects the three bands within the 34kD region corresponding to the p34 protein and its cleavage products. HeLa cell lysate or human colon carcinoma is suggested as a positive control for immunoblotting. LEP fibroblast cell lysate is suggested as a negative control. Paraffin embedded tissue is reactive for immunohistochemistry using high temperature release and 0.1% saponin treatment or other permeabilization method.
Background	p34 cdc2 is a serine-threonine protein kinase of 34,000 daltons that complexes with cyclin to form maturation promoting factor (MPF). The inactive form of the protein is phosphorylated at threonine (T) and tyrosine (Y) residues. In humans the phosphor-ylation appears to be performed by p60src. The active form of the protein is dephosphorylated and it functions by phosphorylating a number of proteins. The phosphorylation activity is coupled to the entry into the M-phase of the cell. p34 cdc2 protein must be associated with a normal cyclin protein for the M-phase to be completed normally. Association with deletion mutants of cyclin halts the M-phase before it is completed.
Purity And Specificity	This protein A purified mouse monoclonal antibody reacts specifically with p34 cdc2 in human tissues and cell lines. This antibody is not cross reactive with other cyclin dependent kinases. Cross reactivity with p34 cdc2 from other sources, especially mouse and rat will occur. This reagent has broad interspecies reactivity.
Assay Dilutions	User Optimized
ELISA	1:5,000 - 1:20,000
WESTERN BLOT	1:500 - 1:1,000
OTHER ASSAYS	User Optimized
Expiration	Expiration date is one (1) year from date of opening.
Immunogen	This protein A purified monoclonal antibody was produced by repeated immunizations with recombinant human p34 cdc2 fusion protein.

Related Products

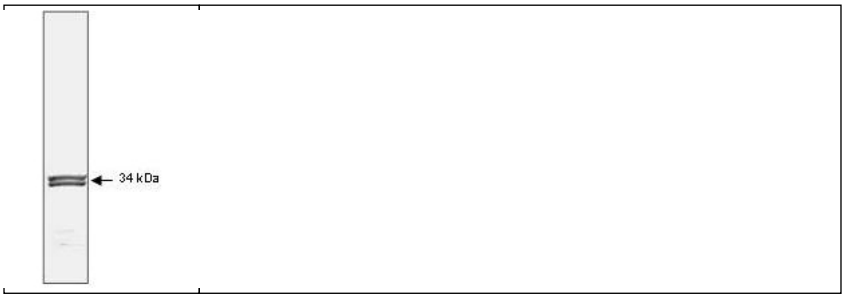
100-401-152	Anti-Cyclin B1 (RABBIT) Antibody - 100-401-152
200-301-174	Anti-p53 (MOUSE) Monoclonal Antibody - 200-301-174
200-301-400	Anti-ATM Protein Kinase pS1981 (MOUSE) Monoclonal Antibody - 200-301-400
610-4302	Anti-MOUSE IgG (H&L) (RABBIT) Antibody Peroxidase Conjugated - 610-4302

Related Links

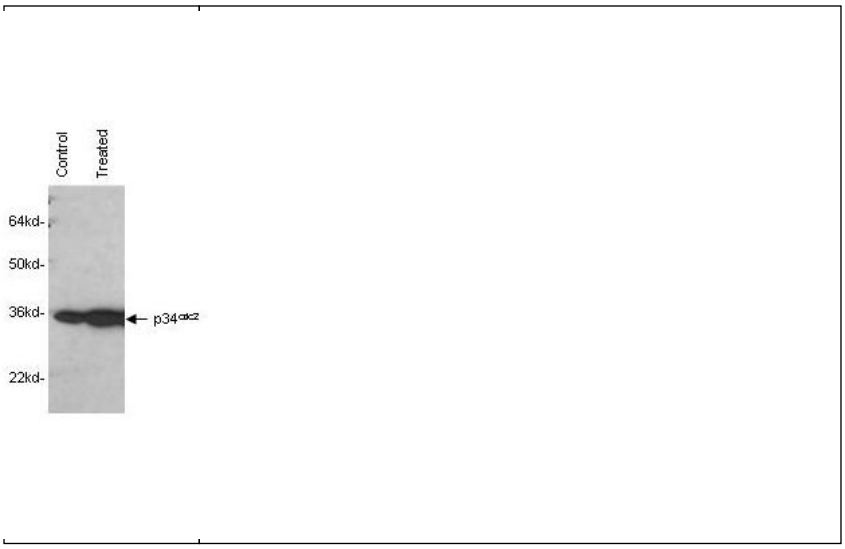
NCBI - P06493.2	http://www.ncbi.nlm.nih.gov/protein/P06493.2
UniProt - P06493	http://www.uniprot.org/uniprot/P06493
GeneID - 983	http://www.ncbi.nlm.nih.gov/gene/983

Images

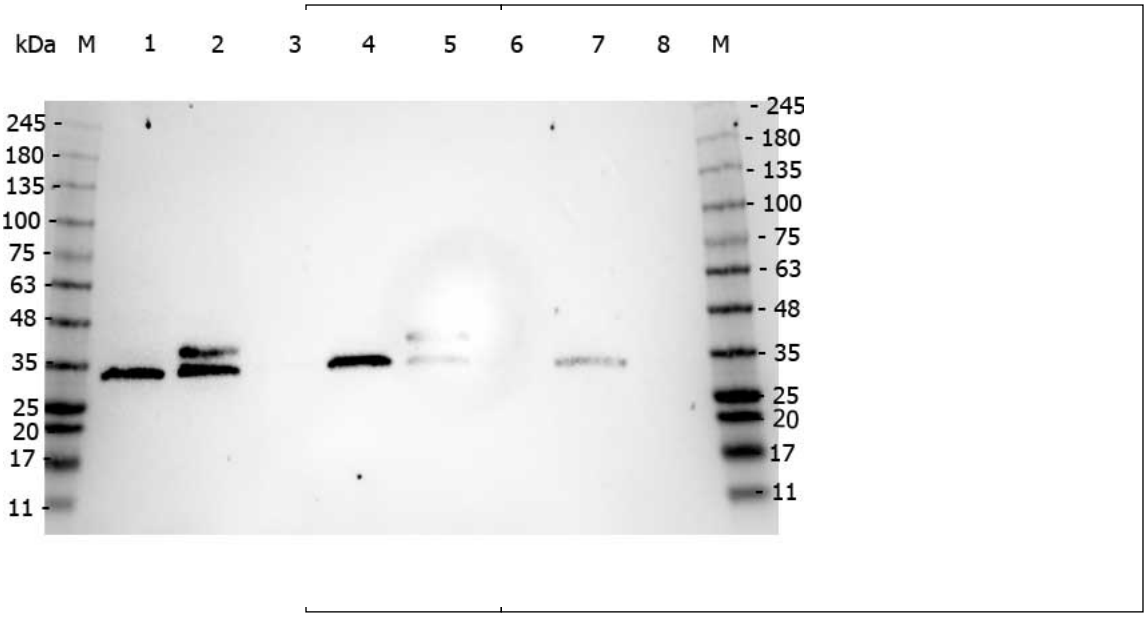
1 Mab anti-Human p34cdc2 antibody (clone POH-1) is shown to detect human p34cdc2by western blot. Detection occurs after 10 µg of a HeLa whole cell lysate is loaded per lane. The blot was incubated with a 1:1,000 dilution of Mab anti-Human p34cdc2at room temperature for 30 min followed by detection using IRDye™800 labeled Goat-a-Mouse IgG [H&L] (610-132-121) diluted 1:5,000. A doublet band corresponding to human p34cdc2is detected at ~34 kDa when compared with known molecular weight standards (not shown). The antibody may be used to detect endogenous human p34cdc2. IRDye™800 fluorescence image was captured using the Odyssey® Infrared Imaging System developed by LI-COR. IRDye is a trademark of LI-COR, Inc. Other detection systems will yield similar results.



2 Mab anti-Human p34cdc2 antibody was used to detect human p34cdc2by western blot in untreated (control) and drug treated (10 µM genistein) lysates of MCF-7 cells. Very strong detection occurs using a 1:1,000 dilution. Personnel Communication, Xiao He Yang, University of Oklahoma Health Sciences Center.



3 Western Blot of Mouse anti-CDC2 (p34) antibody. Marker: Opal Pre-stained ladder (p/n MB-210-0500). Lane 1: HEK293 lysate (p/n W09-000-365). Lane 2: HeLa Lysate (p/n W09-000-363).Lane 3: MCF-7 Lysate (p/n W09-000-360).Lane 4: Jurkat Lysate (p/n W09-000-370).Lane 5: A549 Lysate (p/n W09-001-372).Lane 6: HL-60 Lysate (p/n W09-001-GL3).Lane 7: Raji Lsyate (p/n W09-001-368).Lane 8: NIH/3T3 Lysate (p/n W10-000-358). Load: 35 µg per lane.Primary antibody: CDC2 (p34) antibody at 1:5,000 for overnight at 4°C.Secondary antibody: Peroxidase mouse secondary antibody at 1:30,000 for 60 min at RT.Blocking Buffer: 1% Casein-TTBS for 30 min at RT.Predicted/Observed size: 34 kDa for CDC2 (p34).



Disclaimer

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