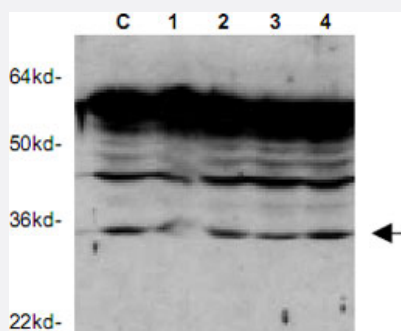


CDC2 polyclonal antibody

Catalog # PAB9939 Size 100 uL

Applications

Western Blot (Cell lysate)



CDC2 polyclonal antibody (Cat # PAB9939) was used to detect human CDC2 by western blot in untreated (Control) and drug treated lysates of MCF-7 cells. Lane 1-4 represents 3.1 uM, 6.2 uM, 12.5 uM and 25.0 uM genistein treatment of cells before lysates were prepared. Detection occurs using a 1 : 1,000 dilution.

Although this antiserum detects non-specific bands at higher MW, a clear induction of signal is observed as the concentration of drug is increased. Personnel Communication, Xiao He Yang, University of Oklahoma Health Sciences Center.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of CDC2.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human CDC2.
Host	Rabbit
Theoretical MW (kDa)	34
Reactivity	Human, Mouse, Rat
Specificity	Antiserum will specifically react with a 34 KDa cdc2 protein from human, rat and mouse tissue. Cross reactivity with cdc2 from other species may also occur.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.

Recommend Usage	ELISA (1:500-1:2000) Western Blot (1:500-1:1000) Immunohistochemistry (1:200-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In antiserum (0.01% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

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Personnel Communication, Xiao He Yang, University of Oklahoma Health Sciences Center.

- Immunohistochemistry

- Immunoprecipitation

- Enzyme-linked Immunoabsorbent Assay

Gene Info — CDC2

Entrez GeneID	983
Gene Name	CDC2
Gene Alias	CDC28A, CDK1, DKFZp686L20222, MGC111195
Gene Description	cell division cycle 2, G1 to S and G2 to M
Omim ID	116940
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is a member of the Ser/Thr protein kinase family. This protein is a catalytic subunit of the highly conserved protein kinase complex known as M-phase promoting factor (MPF), which is essential for G1/S and G2/M phase transitions of eukaryotic cell cycle. Mitotic cyclins stably associate with this protein and function as regulatory subunits. The kinase activity of this protein is controlled by cyclin accumulation and destruction through the cell cycle. The phosphorylation and dephosphorylation of this protein also play important regulatory roles in cell cycle control. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

OTTHUMP00000019660|cell cycle controller CDC2|cell division control protein 2 homolog|cell division cycle 2 protein|cyclin-dependent kinase 1|p34 protein kinase

Publication Reference

- [A 60 kd cdc2-associated polypeptide complexes with the E1A proteins in adenovirus-infected cells.](#)

Giordano A, Whyte P, Harlow E, Franza BR Jr, Beach D, Draetta G.

Cell 1989 Sep; 58(5):981.

Application: IP, Human, HeLa cells

- [Activation of cdc2 protein kinase during mitosis in human cells: cell cycle-dependent phosphorylation and subunit rearrangement.](#)

Draetta G, Beach D.

Cell 1988 Jul; 54(1):17.

Application: AFC, IP, KA, WB-Ce, WB-Re, Human, HeLa cells, Recombinant proteins

Pathway

- [Cell cycle](#)
- [Gap junction](#)
- [p53 signaling pathway](#)

Disease

- [Alzheimer disease](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)

- [Dementia](#)
- [Genetic Predisposition to Disease](#)
- [Lung Neoplasms](#)
- [Pulmonary Disease](#)