Product Name: Cdc2 (phospho Tyr15) Rabbit Polyclonal Antibody
Catalog #: APRab04413

Summary

Production Name	Cdc2 (phospho Tyr15) Rabbit Polyclonal Antibody
Description	Rabbit Polyclonal Antibody
Host	Rabbit
Application	ELISA,WB,
Reactivity	Human,Mouse,Rat,Monkey

Performance

Conjugation	Unconjugated
Modification	Phospho Antibody
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Buffer	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.
Purification	Affinity purification

Immunogen

Gene Name	CDK1
Alternative Names	CDK1; CDC2; CDC28A; CDKN1; P34CDC2; Cyclin-dependent kinase 1; CDK1; Cell division control protein 2 homolog; Cell division protein kinase 1; p34 protein kinase
Gene ID	983.0
SwissProt ID	P06493.The antiserum was produced against synthesized peptide derived from human CDC2 around the phosphorylation site of Tyr15. AA range:5-54

Application

Dilution Ratio	WB 1:500 - 1:2000. ELISA: 1:10000. Not yet tested in other applications.
Molecular Weight	34kD

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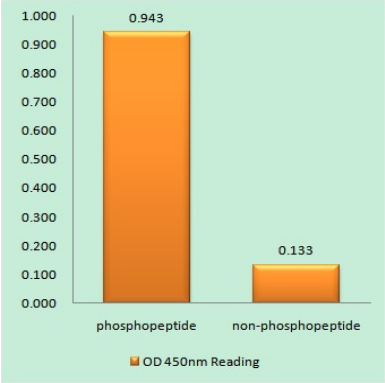
Background

cyclin dependent kinase 1(CDK1) Homo sapiens 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, Mar 2009],catalytic activity:ATP + [DNA-directed RNA polymerase] = ADP + [DNA-directed RNA polymerase] phosphate.,catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Phosphorylation at Thr-14 or Tyr-15 inactivates the enzyme, while phosphorylation at Thr-161 activates it.,function: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.,similarity:Belongs to the protein kinase superfamily.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. CDC2/CDKX subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Forms a stable but non-covalent complex with a regulatory subunit and with a cyclin. Interacts with DLGAP5. Isoform 2 is unable to complex with cyclin B1 and also fails to bind to the CDK inhibitor p21. Interacts with catalytically active CCNB1 and RALBP1 during mitosis to form an endocytotic complex during interphase.,

Research Area

Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;Oocyte meiosis;p53;Gap junction;Progesterone-mediated oocyte maturation;

Image Data



Enzyme-Linked Immunosorbent Assay （Phospho-ELISA） for Immunogen Phosphopeptide （Phospho-left） and Non-Phosphopeptide （Phospho-right）, using CDC2 （Phospho-Tyr15） Antibody

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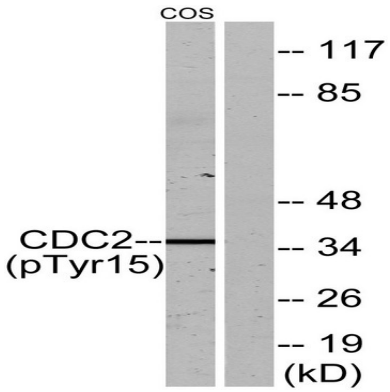
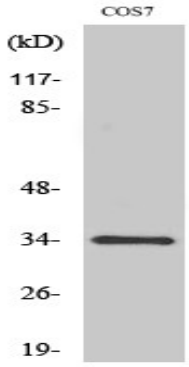


Western blot analysis of lysates from COS7 cells, using CDC2 (Phospho-Tyr15) Antibody. The lane on the right is blocked with the phospho peptide.



Western Blot analysis of various cells using Phospho-Cdc2 (Y15) Polyclonal Antibody

Note

For research use only.