

Cdk2/Cdc2 (phospho Thr160) Polyclonal Antibody

Catalog No :	YP0592
Reactivity :	Human;Mouse;Rat
Applications :	WB;IHC;IF;ELISA
Target :	Cdk2/Cdc2
Fields :	>>FoxO signaling pathway;>>Cell cycle;>>Oocyte meiosis;>>p53 signaling pathway;>>PI3K-Akt signaling pathway;>>Cellular senescence;>>Progesterone-mediated oocyte maturation;>>Cushing syndrome;>>Hepatitis C;>>Hepatitis B;>>Measles;>>Human papillomavirus infection;>>Human T-cell leukemia virus 1 infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Viral carcinogenesis;>>Prostate cancer;>>Small cell lung cancer;>>Gastric cancer
Gene Name :	CDK2
Protein Name :	Cyclin-dependent kinase 2
Human Gene Id :	1017
Human Swiss Prot No :	P24941
Mouse Gene Id :	12566
Mouse Swiss Prot No :	P97377
Rat Swiss Prot No :	Q63699
Immunogen :	Synthesized phospho-peptide around the phosphorylation site of human Cdk2/Cdc2 (phospho Thr160)
Specificity :	Phospho-Cdk2/Cdc2 (T160) Polyclonal Antibody detects endogenous levels of Cdk2/Cdc2 protein only when phosphorylated at T160.
Formulation :	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source :	Polyclonal, Rabbit,IgG

Dilution : WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:20000.. IF 1:50-200

Purification : The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.

Concentration : 1 mg/ml

Storage Stability : -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band : 34kD

Cell Pathway : Cell_Cycle_G1S;Cell_Cycle_G2M_DNA;Oocyte meiosis;p53;Progesterone-mediated oocyte maturation;Pathways in cancer;Prostate cancer;Small cell lung cancer;

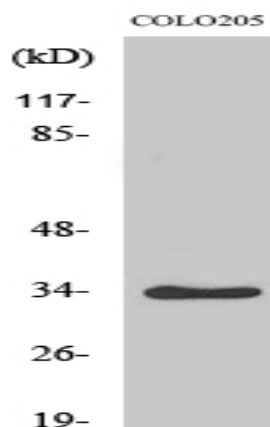
Background : cyclin dependent kinase 2(CDK2) Homo sapiens This gene encodes a member of a family of serine/threonine protein kinases that participate in cell cycle regulation. The encoded protein is the catalytic subunit of the cyclin-dependent protein kinase complex, which regulates progression through the cell cycle. Activity of this protein is especially critical during the G1 to S phase transition. This protein associates with and regulated by other subunits of the complex including cyclin A or E, CDK inhibitor p21Cip1 (CDKN1A), and p27Kip1 (CDKN1B). Alternative splicing results in multiple transcript variants. [provided by RefSeq, Mar 2014],

Function : catalytic activity:ATP + a protein = ADP + a phosphoprotein.,enzyme regulation:Phosphorylation at Thr-14 or Tyr-15 inactivates the enzyme, while phosphorylation at Thr-160 activates it.,function:Involved in the control of the cell cycle. Interacts with cyclins A, B1, B3, D, or E. Activity of CDK2 is maximal during S phase and G2.,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:Found in a complex with CABLES1, CCNA1 and CCNE1. Interacts with CABLES1 (By similarity). Interacts with UHRF2. Part of a complex consisting of UHRF2, CDK2 and CCNE1. Interacts with the Speedy/Ringo proteins SPDYA and SPDYC. Found in a complex with both SPDYA and CDKN1B/KIP1.,

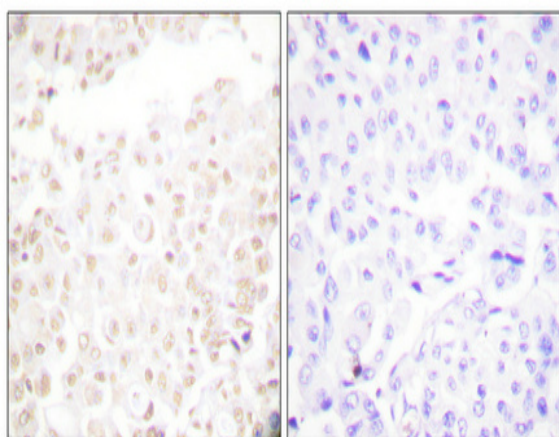
Subcellular Location : Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Nucleus, Cajal body. Cytoplasm. Endosome. Localized at the centrosomes in late G2 phase after separation of the centrosomes but before the start of prophase. Nuclear-cytoplasmic trafficking is mediated during the inhibition by 1,25-(OH)(2)D(3).

Expression : Epithelium,Lung,Placenta,

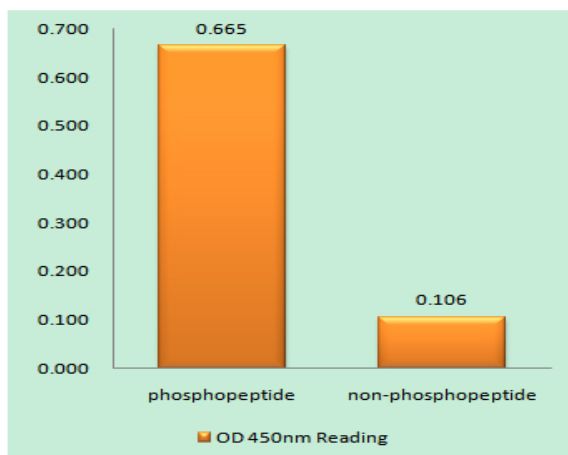
Products Images



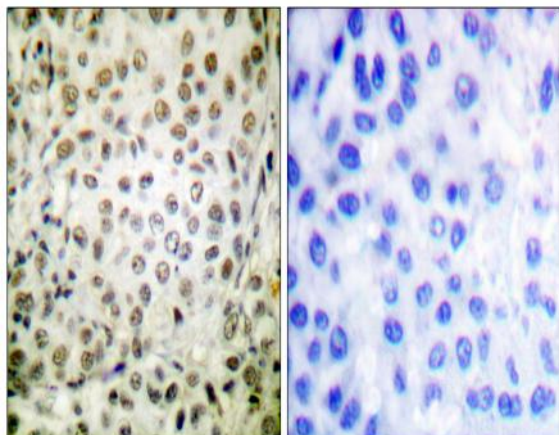
Western Blot analysis of various cells using Phospho-Cdk2/Cdc2 (T160) Polyclonal Antibody diluted at 1:500



Immunohistochemical analysis of paraffin-embedded Human brain. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negative control (right) obtained from antibody was pre-absorbed by immunogen peptide.



Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-Phosphopeptide (Phospho-right), using CDK2/CDC2 (Phospho-Thr160) Antibody



Immunohistochemistry analysis of paraffin-embedded human breast cancer, using CDK2/CDC2 (Phospho-Thr160) Antibody. The picture on the right is blocked with the CDK2/CDC2 (Phospho-Thr160) peptide.