

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

P24941

P97377

Human Gene Id: 1017

Human Swiss Prot

No:

Mouse Gene ld: 12566

Mouse Swiss Prot

No:

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, lgG

1/4



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 demain, subunity Found in a complex with CARLES1. CCNA1 and CCNE1

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.

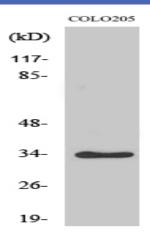
Nuclear-cytoplasmic trafficking is mediated during the inhibition by

1,25-(OH)(2)D(3).

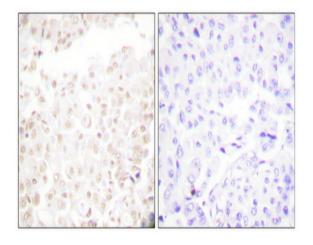
Expression: Epithelium, Lung, Placenta,



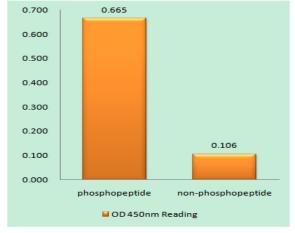
Products Images



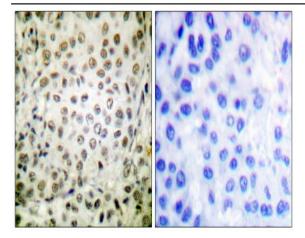
Western Blot analysis of various cells using Phospho-Cdk2/Cdc2 (T160) Polyclonal Antibody diluted at 1:500



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. Negetive contrl (right) obtaned 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.