

p21 (phospho Thr145) Polyclonal Antibody

YP0200 Catalog No:

Reactivity: Human; Mouse; Rat

WB;IHC;IF;ELISA **Applications:**

Target: p21

Fields: >>Endocrine resistance;>>Platinum drug resistance;>>ErbB signaling

> pathway:>>HIF-1 signaling pathway:>>FoxO signaling pathway:>>Cell cycle;>>p53 signaling pathway;>>PI3K-Akt signaling pathway;>>Cellular senescence;>>JAK-STAT signaling pathway;>>Oxytocin signaling

pathway;>>Parathyroid hormone synthesis, secretion and action;>>Cushing

syndrome;>>Hepatitis C;>>Hepatitis B;>>Human cytomegalovirus

infection;>>Human papillomavirus infection;>>Human T-cell leukemia virus 1 infection;>>Kaposi sarcoma-associated herpesvirus infection;>>Epstein-Barr virus infection;>>Pathways in cancer;>>Transcriptional misregulation in cancer;>>Viral carcinogenesis;>>Proteoglycans in cancer;>>MicroRNAs in

cancer;>>Colorectal cancer;>>Renal cell carcinoma;>>Pancreatic cancer;>>Endometrial cancer;>>Glioma;>>Prostate cancer;>>Thyroid cancer;>>Basal cell carcinoma;>>Melanoma;>>Bladder cancer;>>Chronic

myeloid leukemia;>>Small cell lung cancer;>>Non-small cell lung

cancer;>>Breast cancer;>>Hepatocellular carcinoma;

Gene Name: CDKN1A

Protein Name: Cyclin-dependent kinase inhibitor 1

P39689

Human Gene Id: 1026

Human Swiss Prot P38936

No:

Mouse Gene Id: 12575

Mouse Swiss Prot

No:

The antiserum was produced against synthesized peptide derived from human Immunogen:

p21 Cip1 around the phosphorylation site of Thr145. AA range:111-160

Phospho-p21 (T145) Polyclonal Antibody detects endogenous levels of p21 **Specificity:**

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protein only when phosphorylated at T145.

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: 1:10000.. 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)

Molecularweight: 18kD

Cell Pathway: Stem cell pathway; ErbB/HER; PI3K/Akt; AMPK;

Cell_Cycle_G1S;Cell_Cycle_G2M_DNA; Protein_Acetylation

Background: This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded

protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen, a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of

cyclin-dependent kinase2, and may be instrumental in the execution of apoptosis

following caspase activation. Mice that lac

Function: function: May be the important intermediate by which p53 mediates its role as an

inhibitor of cellular proliferation in response to DNA damage. Binds to and inhibits cyclin-dependent kinase activity, preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression.,induction:By

p53, mezerein (antileukemic compound) and interferon

beta.,PTM:Phosphorylation of Thr-145 by Akt or of Ser-146 by PKC impairs binding to PCNA.,similarity:Belongs to the CDI family.,tissue specificity:Expressed

in all adult human tissues, with 5-fold lower levels observed in the brain.,

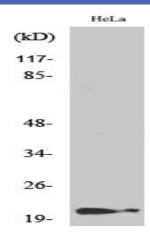
Subcellular Location:

Cytoplasm . Nucleus .

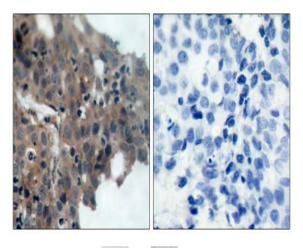
Expression: Expressed in all adult tissues, with 5-fold lower levels observed in the brain.

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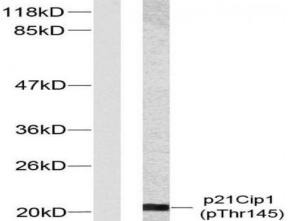
Products Images



Western Blot analysis of various cells using Phospho-p21 (T145) Polyclonal Antibody



Immunohistochemistry analysis of paraffin-embedded human breast carcinoma, using p21 Cip1 (Phospho-Thr145) Antibody. The picture on the right is blocked with the phospho peptide.



Western blot analysis of lysates from HeLa cells treated with EGF, using p21 Cip1 (Phospho-Thr145) Antibody. The lane on the left is blocked with the phospho peptide.