

**p21 (phospho Thr145) Polyclonal Antibody**

<b>Catalog No :</b>	YP0200
<b>Reactivity :</b>	Human;Mouse;Rat
<b>Applications :</b>	WB;IHC;IF;ELISA
<b>Target :</b>	p21
<b>Fields :</b>	>>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;
<b>Gene Name :</b>	CDKN1A
<b>Protein Name :</b>	Cyclin-dependent kinase inhibitor 1
<b>Human Gene Id :</b>	1026
<b>Human Swiss Prot No :</b>	P38936
<b>Mouse Gene Id :</b>	12575
<b>Mouse Swiss Prot No :</b>	P39689
<b>Immunogen :</b>	The antiserum was produced against synthesized peptide derived from human p21 Cip1 around the phosphorylation site of Thr145. AA range:111-160
<b>Specificity :</b>	Phospho-p21 (T145) Polyclonal Antibody detects endogenous levels of p21

protein only when phosphorylated at T145.

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**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

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**Source :** Polyclonal, Rabbit,IgG

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**Dilution :** WB 1:500 - 1:2000. IHC 1:100 - 1:300. ELISA: 1:10000.. IF 1:50-200

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

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**Concentration :** 1 mg/ml

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

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**Molecularweight :** 18kD

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**Cell Pathway :** Stem cell pathway; ErbB/HER; PI3K/Akt; AMPK;  
Cell\_Cycle\_G1S;Cell\_Cycle\_G2M\_DNA; Protein\_Acetylation

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**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

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**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.,

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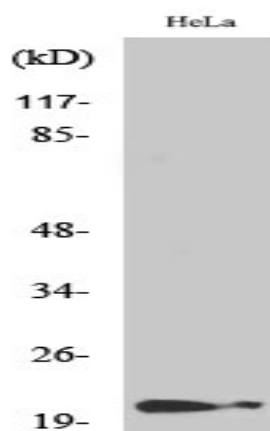
**Subcellular Location :** Cytoplasm . Nucleus .

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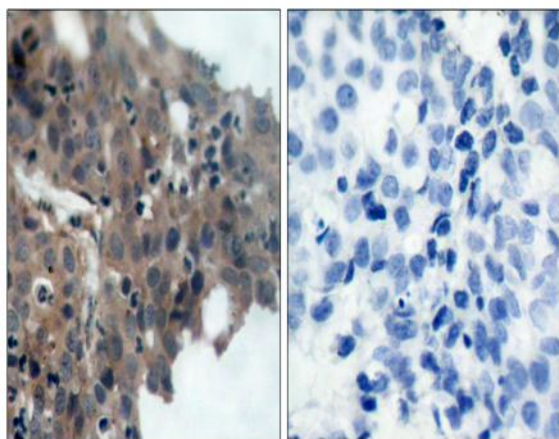
**Expression :** Expressed in all adult tissues, with 5-fold lower levels observed in the brain.

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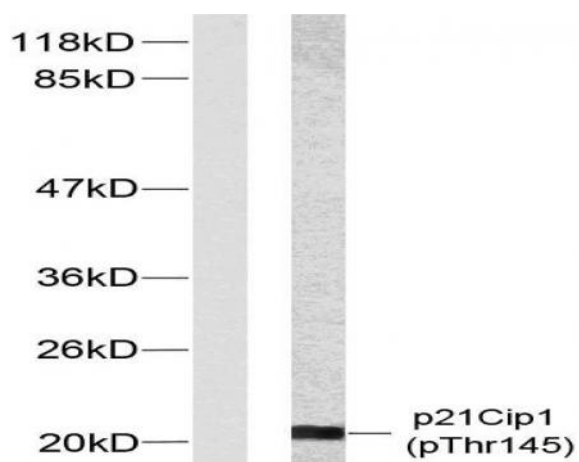
## Products Images



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.