



# p21 (phospho Thr145) Polyclonal Antibody

<b>Catalog No</b>	YP-Ab-16596
<b>Isotype</b>	IgG
<b>Reactivity</b>	Human;Mouse;Rat
<b>Applications</b>	WB;IHC;IF;ELISA
<b>Gene Name</b>	CDKN1A
<b>Protein Name</b>	Cyclin-dependent kinase inhibitor 1
<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.
<b>Formulation</b>	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
<b>Source</b>	Polyclonal, Rabbit,IgG
<b>Purification</b>	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
<b>Dilution</b>	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
<b>Concentration</b>	1 mg/ml
<b>Purity</b>	≥90%
<b>Storage Stability</b>	-20°C/1 year
<b>Synonyms</b>	CDKN1A; CAP20; CDKN1; CIP1; MDA6; PIC1; SDI1; WAF1; Cyclin-dependent kinase inhibitor 1; CDK-interacting protein 1; Melanoma differentiation-associated protein 6; MDA-6; p21
<b>Observed Band</b>	
<b>Cell Pathway</b>	Cytoplasm . Nucleus .
<b>Tissue Specificity</b>	Expressed in all adult tissues, with 5-fold lower levels observed in the brain.
<b>Function</b>	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.,
<b>Background</b>	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

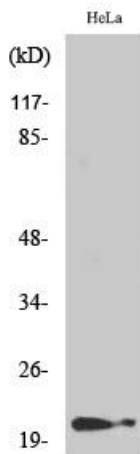
**matters needing attention**

Avoid repeated freezing and thawing!

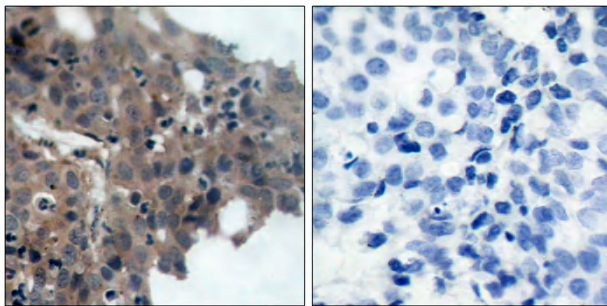
**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

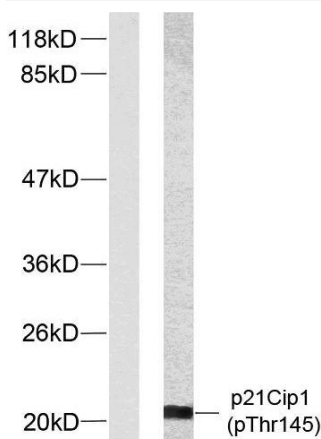
**Products Images**



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.