# Phospho-p21 Cip1 (Thr145) Ab

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| Cat.#: AF3290 | Concn.: 1mg/ml | Mol.Wt.: kDa |
| Size: 100ul,200ul | Source: Rabbit | Clonality: Polyclonal |

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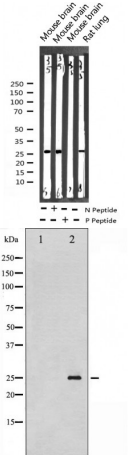
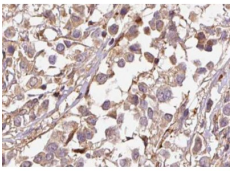
| Application: | WB 1:500-1:2000 IHC 1:50-1:200, IF/ICC 1:100-1:500 |
| Reactivity: | Human,Mouse,Rat |
| Purification: | The Ab is from purified rabbit serum by affinity purification via sequential chromatography on phospho- and non-phospho-peptide affinity columns. |
| Specificity: | Phospho-p21 Cip1 (Thr145) Ab detects endogenous levels of p21 Cip1 only when phosphorylated at Threonine 145. |
| Immunogen: | A synthesized peptide derived from human p21 Cip1 around the phosphorylation site of Threonine 145. |
| Uniprot: | P38936 |
| Description: | This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 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. |
| Subcellular Location: | Cytoplasm. Nucleus. |
| Tissue Specificity: | Expressed in all adult tissues, with 5-fold lower levels observed in the brain. |
| Similarity: | The PIP-box K+4 motif mediates both the interaction with PCNA and the recruitment of the DCX(DTL) complex: while the PIP-box interacts with PCNA, the presence of the K+4 submotif, recruits the DCX(DTL) complex, leading to its ubiquitination.The C-terminal is required for nuclear localization of the cyclin D-CDK4 complex.Belongs to the CDI family. |
| Storage Condition and Buffer: | Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt. |




Western blot analysis of Phospho-p21 Cip1 (Thr145) expression in various lysates

Western blot analysis of p21 Cip1 phosphorylation expression in EGF treated HeLa whole cell lysates,The lane on the left is treated with the antigen-specific peptide.



AF3290 at 1/100 staining human breast carcinoma tissue sections by IHC-P. The tissue was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The tissue was then blocked and incubated with the Ab for 1.5 hours at 22°C. An HRP conjugated goat anti-rabbit Ab was used as the secondary.

AF3290 staining HeLa by IF/ICC. The sample were fixed with PFA and permeabilized in 0.1% Triton X-100,then blocked in 10% serum for 45 minutes at 25°C. The primary Ab was diluted at 1/200 and incubated with the sample for 1 hour at 37°C. An  Alexa Fluor 594 conjugated goat anti-rabbit IgG (H+L) Ab, diluted at 1/600, was used as the secondary Ab.

*IMPORTANT:* For western blot, incubate membrane with diluted primary Ab in 5% w/v milk , 1X TBS, 0.1% Tween®20 at 4°C with gentle shaking, overnight.