

# p21 Antibody

Rabbit mAb

Catalog # AP90151

## Product Information

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<b>Application</b>	WB, IHC, IF, ICC, IP, IHF
<b>Primary Accession</b>	<a href="#">P38936</a>
<b>Reactivity</b>	Human
<b>Clonality</b>	Monoclonal
<b>Other Names</b>	CAP20; CDKN1; CIP1; MDA-6; P21; SDI1; WAF1; P21cip1;
<b>Isotype</b>	Rabbit IgG
<b>Host</b>	Rabbit
<b>Calculated MW</b>	18119

## Additional Information

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<b>Dilution</b>	WB 1:500~1:2000 IHC 1:50~1:200 ICC/IF 1:50~1:200 IP 1:50
<b>Purification</b>	Affinity-chromatography
<b>Immunogen</b>	A synthesized peptide derived from human p21
<b>Description</b>	The tumor suppressor protein p21 Waf1/Cip1 acts as an inhibitor of cell cycle progression. It functions in stoichiometric relationships forming heterotrimeric complexes with cyclins and cyclin-dependent kinases. In association with CDK2 complexes, it serves to inhibit kinase activity and block progression through G1/S. However, p21 may also enhance assembly and activity in complexes of CDK4 or CDK6 and cyclin D.
<b>Storage Condition and Buffer</b>	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol. Store at +4°C short term. Store at -20°C long term. Avoid freeze / thaw cycle.

## Protein Information

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<b>Name</b>	CDKN1A ( <a href="#">HGNC:1784</a> )
<b>Function</b>	Plays an important role in controlling cell cycle progression and DNA damage-induced G2 arrest (PubMed: <a href="#">9106657</a> ). Involved in p53/TP53 mediated inhibition of cellular proliferation in response to DNA damage. Also involved in p53-independent DNA damage-induced G2 arrest mediated by CREB3L1 in astrocytes and osteoblasts (By similarity). Binds to and inhibits cyclin-dependent kinase activity, preventing phosphorylation of critical cyclin-dependent kinase substrates and blocking cell cycle progression. Functions in the nuclear localization and assembly of cyclin D-CDK4 complex and promotes its kinase activity towards RB1. At higher stoichiometric ratios, inhibits the kinase activity of the cyclin D-CDK4 complex. Inhibits DNA synthesis by DNA polymerase delta by competing with POLD3 for PCNA binding (PubMed: <a href="#">11595739</a> ). Negatively regulates the CDK4- and CDK6-driven phosphorylation of RB1 in keratinocytes, thereby resulting in the release of

E2F1 and subsequent transcription of E2F1-driven G1/S phase promoting genes (By similarity).

**Cellular Location**

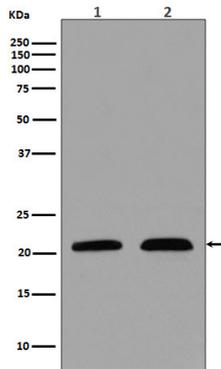
Cytoplasm. Nucleus

**Tissue Location**

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

**Images**

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Western blot analysis of p21 in (1) MCF-7 cell lysate; (2) LnCaP cell lysate.

Image not found : 202311/AP90151-IHC.jpg

Immunohistochemical analysis of paraffin-embedded human colon, using p21 Antibody.

Image not found : 202311/AP90151-IF.jpg

Immunofluorescent analysis of MCF7 cells, using p21 Antibody .

Image not found : 202311/AP90151-wb6.jpg

Expression of estrogen receptors and androgen receptor and their clinical significance in gastric cancer.  
-Oncotarget

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