

**Anti-p21 CDKN1A Rabbit Monoclonal Antibody**  
Catalog # ABO13229**Specification****Anti-p21 CDKN1A Rabbit Monoclonal Antibody - Product Information**

Application	WB, IHC, IF, ICC, IP
Primary Accession	<a href="#">P38936</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

**Description**

Anti-p21 CDKN1A Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP applications. This antibody reacts with Human.

**Anti-p21 CDKN1A Rabbit Monoclonal Antibody - Additional Information**

**Gene ID** 1026

**Other Names**

Cyclin-dependent kinase inhibitor 1, CDK-interacting protein 1, Melanoma differentiation-associated protein 6, MDA-6, p21, CDKN1A ([HGNC:1784](http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=1784))

**Calculated MW**

18119 MW KDa

**Application Details**

WB 1:500-1:2000<br>IHC 1:50-1:200<br>ICC/IF 1:50-1:200<br>IP 1:50

**Subcellular Localization**

Cytoplasm. Nucleus.

**Tissue Specificity**

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

**Contents**

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

**Immunogen**

A synthesized peptide derived from human p21

**Purification**

Affinity-chromatography

Storage

Store at -20°C for one year. For short term

storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Anti-p21 CDKN1A Rabbit Monoclonal Antibody - Protein Information

Name CDKN1A ([HGNC:1784](#))

### Function

Plays an important role in controlling cell cycle progression and DNA damage-induced G2 arrest (PubMed:<a href="http://www.uniprot.org/citations/9106657" target="\_blank">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="http://www.uniprot.org/citations/11595739" target="\_blank">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

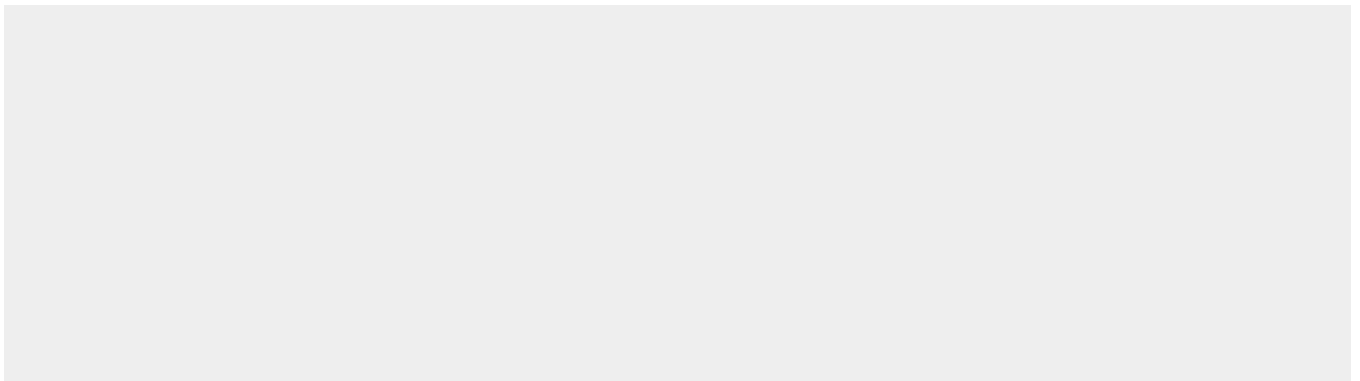
Expressed in all adult tissues, with 5-fold lower levels observed in the brain

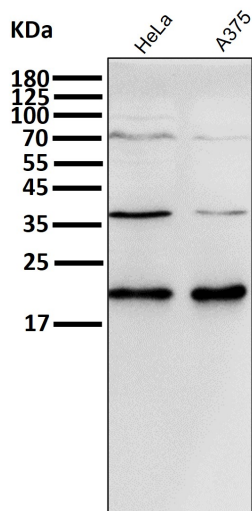
## Anti-p21 CDKN1A Rabbit Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

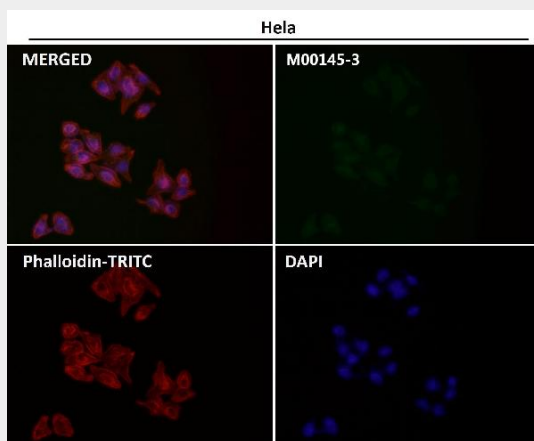
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## Anti-p21 CDKN1A Rabbit Monoclonal Antibody - Images

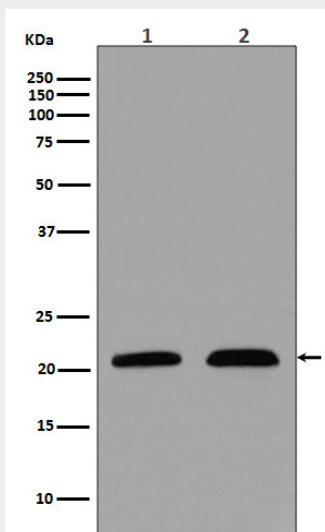




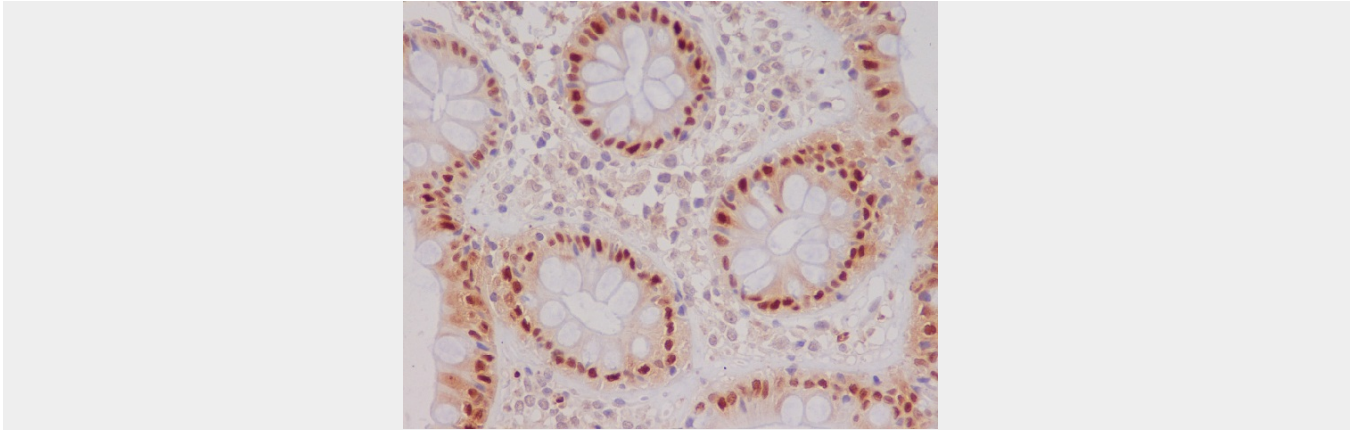
All lanes use the Antibody at 1:2K dilution for 1 hour at room temperature.



Immunofluorescent analysis using the Antibody at 1:500 dilution.



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



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



Immunofluorescent analysis of MCF7 cells, using p21 Antibody.