

Anti-p21 CDKN1A Rabbit Monoclonal Antibody

Catalog # ABO13250

Product Information

Application	WB, IF, ICC
Primary Accession	P38936
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid
Description	Anti-p21 CDKN1A Rabbit Monoclonal Antibody . Tested in WB, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

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)
Calculated MW	18119
Application Details	WB 1:500-1:2000 ICC/IF 1:50-1:200
Subcellular Localization	Cytoplasm. Nucleus.
Tissue Specificity	Expressed in all adult tissues, with 5-fold lower levels observed in the brain.
Source	Eukaryota
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.
Clone Names	Clone: EAI-3
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.

Protein Information

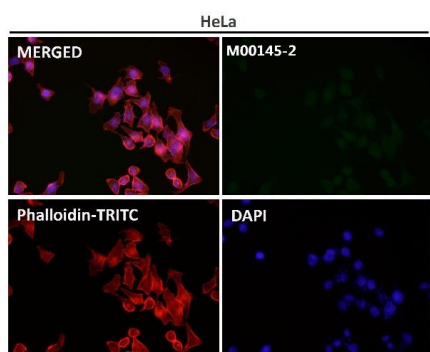
Name	CDKN1A (HGNC:1784)
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Function Plays an important role in controlling cell cycle progression and DNA damage-induced G2 arrest (PubMed:[9106657](#)). Involved in p53/TP53 mediated inhibition of cellular proliferation in response to DNA damage. Also 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:[11595739](#)). 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).

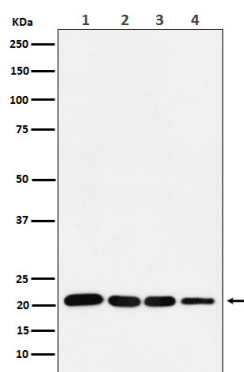
Cellular Location Cytoplasm. Nucleus

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

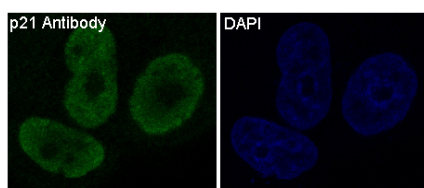
Images



Immunofluorescent analysis using the Antibody at 1:150 dilution.



Western blot analysis of p21 in (1) MCF-7 cell lysate; (2) HeLa cell lysate. (3) LnCap cell lysate; (4) U87 MG cell lysate.



Immunofluorescent analysis of MCF7 cells, using p21 Antibody.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.