

p21 Rabbit mAb
Catalog # AP76933**Specification**

p21 Rabbit mAb - Product Information

Application	WB, IF, ICC
Primary Accession	P38936
Reactivity	Rat, Human, Mouse
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human p21
Purification	Affinity Chromatography
Calculated MW	Calculated MW: 18 kDa; Observed MW: 21 kDa

p21 Rabbit mAb - Additional Information**Gene ID** 1026**Other Names**
CDKN1A**Dilution**
WB~~1:1000
IF~~1:50~200
ICC~~N/A**Format**
Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.**Storage**
Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.**p21 Rabbit mAb - Protein Information****Name** CDKN1A ([HGNC:1784](#))**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

p21 Rabbit mAb - 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](#)

p21 Rabbit mAb - Images