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CDKN1A Antibody (C-term)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20797c

Specification

CDKN1A Antibody (C-term) - Product Information

Application	**WB,E**
Primary Accession	P38936
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**18119**

CDKN1A Antibody (C-term) - 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, CAP20, CDKN1, CIP1, MDA6, PIC1, SDI1, WAF1

Target/Specificity
This CDKN1A antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 133-164 amino acids from the C-terminal region of human CDKN1A.

Dilution
WB~~1:1000
E~~Use at an assay dependent concentration.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
CDKN1A Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

CDKN1A Antibody (C-term) - 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

CDKN1A Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CDKN1A Antibody (C-term) - Images

CDKN1A Antibody (C-term) - Background

May be the important intermediate by which p53/TP53 mediates its role as an inhibitor of cellular proliferation in response to DNA damage. 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.

CDKN1A Antibody (C-term) - References

Harper J.W.,et al.Cell 75:805-816(1993).
El-Deiry W.S.,et al.Cell 75:817-825(1993).
Xiong Y.,et al.Nature 366:701-704(1993).
Jiang H.,et al.Mol. Cell. Differ. 1:285-299(1993).
Jiang H.,et al.Oncogene 10:1855-1864(1995).