

CDKN1A / WAF1 / p21 Antibody (aa111-160)
Rabbit Polyclonal Antibody
Catalog # ALS16537**Specification**

CDKN1A / WAF1 / p21 Antibody (aa111-160) - Product Information

Application	IHC, WB
Primary Accession	P38936
Other Accession	1026
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	18119

CDKN1A / WAF1 / p21 Antibody (aa111-160) - Additional Information**Gene ID** 1026**Other Names**

CDKN1A, CDKN1, CIP1, CDK-interacting protein 1, DNA synthesis inhibitor, p21CIP1, MDA6, PIC1, SDI1, WAF1, CAP20, CDK-interaction protein 1, MDA-6, p21

Target/Specificity

CDKN1A Antibody detects endogenous levels of total CDKN1A protein.

Reconstitution & StoragePBS (without Mg²⁺, Ca²⁺), pH 7.4, 150 mM sodium chloride, 0.02% sodium azide, 50% glycerol. Store at -20°C for up to one year.**Precautions**

CDKN1A / WAF1 / p21 Antibody (aa111-160) is for research use only and not for use in diagnostic or therapeutic procedures.

CDKN1A / WAF1 / p21 Antibody (aa111-160) - 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).

Cellular Location

Cytoplasm. Nucleus

Tissue Location

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

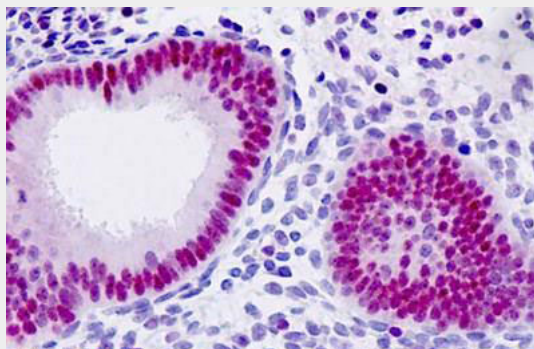
Volume

50 µl

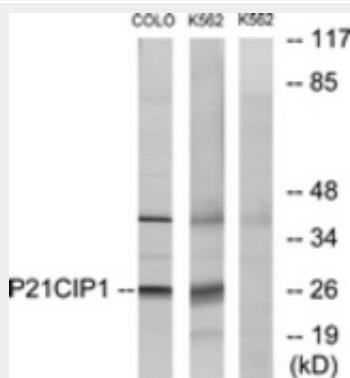
CDKN1A / WAF1 / p21 Antibody (aa111-160) - Protocols

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](#)

CDKN1A / WAF1 / p21 Antibody (aa111-160) - Images

Anti-CDKN1A / WAF1 / p21 antibody IHC staining of human uterus, endometrium.



Western blot of extracts from COLO/K562 cells, treated with EGF, using p21 Cip1 (Ab-145) Antibody.

CDKN1A / WAF1 / p21 Antibody (aa111-160) - 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 / WAF1 / p21 Antibody (aa111-160) - 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).