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# Mouse p21Cip1 Antibody (C-term S148)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20419b

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | P39689 |
| **Reactivity** | Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB43031 |
| **Calculated MW** | 17785 |
| **Antigen Region** | 126-154 |

## Additional Information

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| **Gene ID** | 12575 |
| **Other Names** | Cyclin-dependent kinase inhibitor 1, CDK-interacting protein 1, Melanoma differentiation-associated protein, p21, Cdkn1a, Cip1, Waf1 |
| **Target/Specificity** | This Mouse p21Cip1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 126-154 amino acids from the C-terminal region of mouse p21Cip1. |
| **Dilution** | WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **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** | Mouse p21Cip1 Antibody (C-term S148) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | Cdkn1a |
| **Synonyms** | Cip1, Waf1 |
| **Function** | May be involved in p53/TP53 mediated inhibition 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 (PubMed:25329316). Inhibits DNA synthesis by DNA polymerase delta by competing with POLD3 for PCNA binding (By similarity). Plays an important role in controlling cell cycle progression and DNA damage-induced G2 arrest (By similarity).

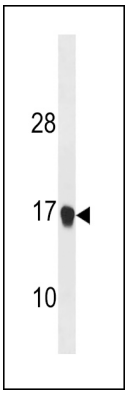
**Cellular Location** Cytoplasm. Nucleus

**Tissue Location** Expressed in keratinocytes (at protein level).

## 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 (By similarity).

## Images




Mouse p21Cip1 Antibody (C-term S148) (Cat. #AP20419b) western blot analysis in mouse NIH-3T3 cell line lysates (35ug/lane).This demonstrates the Mouse p21Cip1 antibody detected the Mouse p21Cip1 protein (arrow).