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# CDKN2A Antibody(N-term S8)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP19504a

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | P42771 |
| **Other Accession** | NP_000068.1 |
| **Reactivity** | Human |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB41435 |
| **Calculated MW** | 16533 |
| **Antigen Region** | 1-30 |

## Additional Information

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| **Gene ID** | 1029 |
| **Other Names** | Cyclin-dependent kinase inhibitor 2A, isoforms 1/2/3, Cyclin-dependent kinase 4 inhibitor A, CDK4I, Multiple tumor suppressor 1, MTS-1, p16-INK4a, p16-INK4, p16INK4A, CDKN2A, CDKN2, MTS1 |
| **Target/Specificity** | This CDKN2A antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human CDKN2A. |
| **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** | CDKN2A Antibody(N-term S8) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | CDKN2A ( HGNC:1787) |
| **Synonyms** | CDKN2, MTS1 |

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| **Function** | Acts as a negative regulator of the proliferation of normal cells by interacting strongly with CDK4 and CDK6. This inhibits their ability to interact with cyclins D and to phosphorylate the retinoblastoma protein. |
| **Cellular Location** | Cytoplasm. Nucleus |
| **Tissue Location** | Widely expressed but not detected in brain or skeletal muscle. Isoform 3 is pancreas-specific |

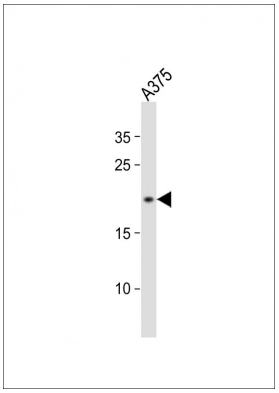
## Background

This gene generates several transcript variants which differ in their first exons. At least three alternatively spliced variants encoding distinct proteins have been reported, two of which encode structurally related isoforms known to function as inhibitors of CDK4 kinase. The remaining transcript includes an alternate first exon located 20 Kb upstream of the remainder of the gene; this transcript contains an alternate open reading frame (ARF) that specifies a protein which is structurally unrelated to the products of the other variants. This ARF product functions as a stabilizer of the tumor suppressor protein p53 as it can interact with, and sequester, MDM1, a protein responsible for the degradation of p53. In spite of the structural and functional differences, the CDK inhibitor isoforms and the ARF product encoded by this gene, through the regulatory roles of CDK4 and p53 in cell cycle G1 progression, share a common functionality in cell cycle G1 control. This gene is frequently mutated or deleted in a wide variety of tumors, and is known to be an important tumor suppressor gene.

## References

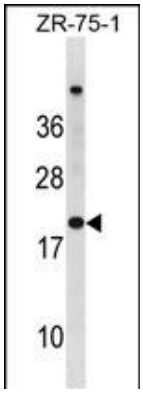

Kovacs, E., et al. Proc. Natl. Acad. Sci. U.S.A. 107(12):5429-5434(2010)
Irvine, M., et al. Cell Cycle 9(4):829-839(2010)
Zhang, H.J., et al. J. Cell. Biochem. 106(3):464-472(2009)
Ivanchuk, S.M., et al. Cell Cycle 7(12):1836-1850(2008)
Bandyopadhyay, K., et al. Biochemistry 46(49):14325-14334(2007)


## Images




Anti-CDKN2A Antibody (S8)at 1:500 dilution + A375 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution Predicted band size : 17 kDa Blocking/Dilution buffer: 5% NFDM/TBST.

CDKN2A Antibody (N-term S8) (Cat. #AP19504a) western blot analysis in ZR-75-1 cell line lysates (35ug/lane).This demonstrates the CDKN2A antibody detected the CDKN2A protein (arrow).

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