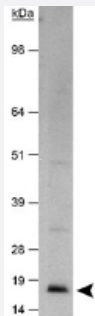


CDKN2A polyclonal antibody

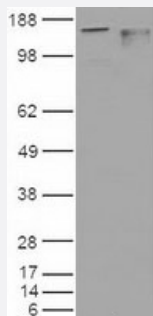
Catalog # PAB12462 Size 100 uL

Applications



Western Blot (Cell lysate)

Western blot analysis of CDKN2A in HeLa whole cell lysate CDKN2A polyclonal antibody (Cat # PAB12462).



Western Blot (Transfected lysate)

Western blot analysis of CDKN2A in lysates of cells that were transfected with the pCMV6-ENTRY control or pCMV6-ENTRY CDKN2A cDNA using CDKN2A polyclonal antibody (Cat # PAB12462).

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of CDKN2A.
Immunogen	A synthetic peptide corresponding to amino acids 50-150 of human CDKN2A.
Host	Rabbit
Reactivity	Human
Specificity	This antibody is specific to p14ARF.
Form	Liquid
Quality Control Testing	Antibody Reactive Against Synthetic Peptide.

Recommend Usage	Immunocytochemistry (1:50-1:200) Immunofluorescence (1:100) The optimal working dilution should be determined by the end user.
Storage Buffer	In Tris-glycine, 150 mM NaCl (0.05% sodium azide)
Storage Instruction	Store at -20°C or -80°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

Western blot analysis of CDKN2A in HeLa whole cell lysate CDKN2A polyclonal antibody (Cat # PAB12462).

- Western Blot (Transfected lysate)

Western blot analysis of CDKN2A in lysates of cells that were transfected with the pCMV6-ENTRY control or pCMV6-ENTRY CDKN2A cDNA using CDKN2A polyclonal antibody (Cat # PAB12462).

- Immunocytochemistry

- Immunofluorescence

Gene Info — CDKN2A

Entrez GeneID	1029
Protein Accession#	Q8N726
Gene Name	CDKN2A
Gene Alias	ARF, CDK4I, CDKN2, CMM2, INK4, INK4a, MLM, MTS1, TP16, p14, p14ARF, p16, p16INK4, p16INK4a, p19
Gene Description	cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4)
Omim ID	151623 155601 155755 600160 606719
Gene Ontology	Hyperlink

Gene Summary

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. [provided by RefSeq]

Other Designations

CDK4 inhibitor p16-INK4|OTTHUMP00000021147|OTTHUMP00000021148|cell cycle negative regulator beta|cyclin-dependent kinase inhibitor 2A|cyclin-dependent kinase inhibitor p16|multiple tumor suppressor 1

Publication Reference

- [Hepatitis B virus X protein via the p38MAPK pathway induces E2F1 release and ATR kinase activation mediating p53 apoptosis.](#)

Wang WH, Hullinger RL, Andrisani OM.

The Journal of Biological Chemistry 2008 Jul; 283(37):25455.

- [Frequent p16-independent inactivation of p14ARF in human melanoma.](#)

Freedberg DE, Rigas SH, Russak J, Gai W, Kaplow M, Osman I, Turner F, Randerson-Moor JA, Houghton A, Busam K, Timothy Bishop D, Bastian BC, Newton-Bishop JA, Polsky D.

Journal of the National Cancer Institute 2008 Jun; 100(11):784.

Application: IHC-P, WB, Human, Human Melanoma, SK-MEL 192 cells

- [Large-scale molecular comparison of human schwann cells to malignant peripheral nerve sheath tumor cell lines and tissues.](#)

Miller SJ, Rangwala F, Williams J, Ackerman P, Kong S, Jegga AG, Kaiser S, Aronow BJ, Frahm S, Kluwe L, Mautner V, Upadhyaya M, Muir D, Wallace M, Hagen J, Quelle DE, Watson MA, Perry A, Gutmann DH, Ratner N.

Cancer Research 2006 Mar; 66(5):2584.

Application: WB-Ce, Human, Malignant peripheral nerve sheath tumor cell lines

- [N-terminal polyubiquitination and degradation of the Arf tumor suppressor.](#)

Kuo ML, den Besten W, Bertwistle D, Roussel MF, Sherr CJ.

Genes & Development 2004 Aug; 18(15):1862.

Application: IP, WB, Mouse, BN75, NIH/3T3 cells

- [The p14ARF tumor suppressor protein facilitates nucleolar sequestration of hypoxia-inducible factor-1alpha \(HIF-1alpha \) and inhibits HIF-1-mediated transcription.](#)

Fatyol K, Szalay AA.

The Journal of Biological Chemistry 2001 Jul; 276(30):28421.

Application: IF, IP, Human, HT-1080, U-2 OS cells

Pathway

- [Bladder cancer](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Glioma](#)
- [Melanoma](#)
- [Non-small cell lung cancer](#)
- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Aneuploidy](#)
- [Asthma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Barrett Esophagus](#)
- [Bile Duct Neoplasms](#)
- [Birth Weight](#)

- [Brain Ischemia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chagas Disease](#)
- [Cholangiocarcinoma](#)
- [Cholangitis](#)
- [Chromosomal Instability](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
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- [Diabetes Mellitus](#)
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- [Dysplastic Nevus Syndrome](#)

- [Eczema](#)
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- [Insulin Resistance](#)
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- [Kidney Failure](#)
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- [Leukemia](#)
- [Leukoplakia](#)
- [Liver Cirrhosis](#)
- [Lung Neoplasms](#)

- [Lymphoma](#)
- [Malignant melanoma](#)
- [Malnutrition](#)
- [Melanoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Microsatellite Instability](#)
- [Mouth Neoplasms](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 1](#)
- [Multiple Myeloma](#)
- [Myelodysplastic Syndromes](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
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- [Neoplasm Recurrence](#)
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- [Periodontitis](#)

- [Pharyngeal Neoplasms](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
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- [Schizophrenia](#)
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- [Starvation](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Sunburn](#)
- [Urinary Bladder Neoplasms](#)
- [Uveal Neoplasms](#)
- [Vascular Diseases](#)
- [Weight Gain](#)
- [Werner syndrome](#)
- [Wolfram Syndrome](#)