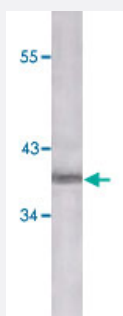


CDKN2A monoclonal antibody, clone 2D9A12

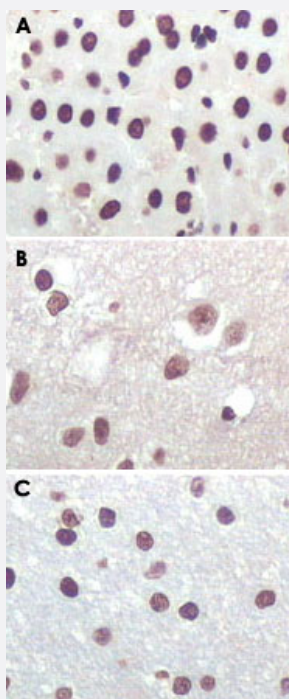
Catalog # MAB10401 Size 100 uL

Applications



Western Blot (Recombinant protein)

Western blot analysis using CDKN2A monoclonal antibody, clone 2D9A12 (Cat # MAB10401) against truncated CDKN2A recombinant protein.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of paraffin-embedded rat liver tissue (A), human brain tissue (B) and brain tumor (C), showing nuclear localization using CDKN2A monoclonal antibody, clone 2D9A12 (Cat # MAB10401) with DAB staining.

Specification

Product Description	Mouse monoclonal antibody raised against recombinant CDKN2A.
Immunogen	Recombinant protein corresponding to human CDKN2A.

Host	Mouse
Reactivity	Human
Form	Liquid
Isotype	IgG2b
Recommend Usage	ELISA (1:10000) Western Blot (1:500-1:2000) Immunohistochemistry (1:200-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In ascites (0.03% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°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 (Recombinant protein)

Western blot analysis using CDKN2A monoclonal antibody, clone 2D9A12 (Cat # MAB10401) against truncated CDKN2A recombinant protein.

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Immunohistochemical analysis of paraffin-embedded rat liver tissue (A), human brain tissue (B) and brain tumor (C), showing nuclear localization using CDKN2A monoclonal antibody, clone 2D9A12 (Cat # MAB10401) with DAB staining.

- Enzyme-linked Immunoabsorbent Assay

Gene Info — CDKN2A

Entrez GeneID	1029
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

- [Ocular Expression and Distribution of Products of the POAG-Associated Chromosome 9p21 Gene Region.](#)

Chidlow G, Wood JP, Sharma S, Dimasi DP, Burdon KP, Casson RJ, Craig JE.

PLoS One 2013 Sep; 8(9):e75067.

Application: IHC-P, WB-Ti, Human, Rat, Brain cortex, Liver, Optic nerve, Retina, Cervical adenocarcinoma

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](#)
- [Coronary Disease](#)
- [Cystadenocarcinoma](#)
- [Diabetes](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Dysplastic Nevus Syndrome](#)
- [Eczema](#)
- [Esophageal Neoplasms](#)
- [Eye Neoplasms](#)
- [Fetal Diseases](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Glucose Intolerance](#)
- [Glucose Metabolism Disorders](#)
- [Head and Neck Neoplasms](#)
- [Heart Diseases](#)
- [Hemorrhage](#)
- [HIV Infections](#)
- [Hyperglycemia](#)
- [Hyperlipidemias](#)
- [Hyperlipoproteinemia Type II](#)

- [Hypersensitivity](#)
- [Hypertension](#)
- [Insulin Resistance](#)
- [Intracranial Aneurysm](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [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](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)

- [Neoplasms](#)
- [Neuroma](#)
- [Nevus](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Periodontitis](#)
- [Pharyngeal Neoplasms](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Retinoblastoma](#)
- [Rhinitis](#)
- [Schizophrenia](#)
- [Skin Neoplasms](#)
- [Starvation](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Sunburn](#)
- [Urinary Bladder Neoplasms](#)
- [Uveal Neoplasms](#)

- [Vascular Diseases](#)
- [Weight Gain](#)
- [Werner syndrome](#)
- [Wolfram Syndrome](#)