

CDKN2A monoclonal antibody, clone DCS-50

Catalog # MAB1472

Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against recombinant CDKN2A.
Immunogen	Recombinant protein corresponding to human CDKN2A.
Host	Mouse
Theoretical MW (kDa)	16
Reactivity	Human
Form	Lyophilized
Isotype	IgG1
Recommend Usage	Immunocytochemistry (1 ug/mL) Immunohistochemistry (Frozen sections) (1-2 ug/mL) Western Blot (0.5-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from mouse ascites fluid, 1.2% sodium acetate (2 mg BSA, 0.01 mg sodium azide).
Storage Instruction	Store at -20°C on dry atmosphere. After reconstitution with 1 mL of PBS buffer will yield a concentration of 100 ug/mL, store at 4°C for one month. It can also be aliquoted and stored frozen at -20°C for a longer time. 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
- Immunohistochemistry (Frozen sections)

- Immunocytochemistry

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

- [CDKN2A mutations in multiple primary melanomas.](#)

Monzon J, Liu L, Brill H, Goldstein AM, Tucker MA, From L, McLaughlin J, Hogg D, Lassam NJ.
The New England Journal of Medicine 1998 Mar; 338(13):879.

- [Frequent mutations of CDKN2 in primary pancreatic adenocarcinomas.](#)

Bartsch D, Shevlin DW, Tung WS, Kisker O, Wells SA Jr, Goodfellow PJ.
Genes, Chromosomes & Cancer 1995 Nov; 14(3):189.

- [Complex structure and regulation of the P16 \(MTS1\) locus.](#)

Stone S, Jiang P, Dayananth P, Tavtigian SV, Katcher H, Parry D, Peters G, Kamb A.

Cancer Research 1995 Jul; 55(14):2988.

Application: WB-Ce, Human, Mouse, T 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](#)
- [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](#)