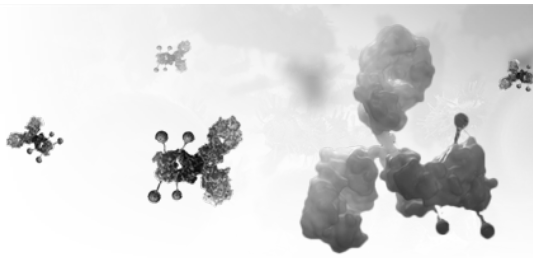

Anti-CDKN2A (aa 50-150) polyclonal antibody (DPAB-814RH)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	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, the E3 ubiquitin-protein ligase MDM2, 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, Sep 2012]
Immunogen	A synthetic peptide made to a portion of human p14ARF (between residues 50-150).
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Purification	Antigen affinity chromatography
Conjugate	Unconjugated
Applications	WB, IF, ICC, IHC-Fr, IHC-P, FACS, IP, ELISA
Molecular Weight	p14ARF tends to run slightly higher than the theoretical MW of 14 kDa.

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Positive Control	BT549 cells or HeLa whole cell extract, antigen standard for CDKN2A (transient overexpression lysate).
Format	Liquid
Concentration	1mg/ml
Size	100 µl
Buffer	TBS
Preservative	0.05% Sodium Azide
Storage	Store at -20° C, Avoid Freeze/Thaw Cycles

GENE INFORMATION

Gene Name	CDKN2A cyclin-dependent kinase inhibitor 2A [Homo sapiens (human)]
Official Symbol	CDKN2A
Synonyms	CDKN2A; cyclin-dependent kinase inhibitor 2A; ARF; MLM; P14; P16; P19; CMM2; INK4; MTS1; TP16; CDK4I; CDKN2; INK4A; MTS-1; P14ARF; P19ARF; P16INK4; P16INK4A; P16-INK4A; cyclin-dependent kinase inhibitor 2A; CDK4 inhibitor p16-INK4; multiple tumor suppressor 1; cell cycle negative regulator beta; cyclin-dependent kinase 4 inhibitor A; cyclin-dependent kinase inhibitor 2A (melanoma, p16, inhibits CDK4); Cyclin-dependent kinase inhibitor 2A, isoforms 1/2/3; Cyclin-dependent kinase 4 inhibitor A; Multiple tumor suppressor 1; CDKN2A; Cell cycle negative regulator beta; Cyclin dependent kinase inhibitor 2A; Cyclin dependent ki
Entrez Gene ID	1029
Protein Refseq	NP_000068
UniProt ID	K7PML8
Chromosome Location	9p21
Pathway	Apoptosis; Apoptosis Modulation and Signaling; Bladder cancer; Cell Cycle; Cell cycle; Cellular Senescence; Cellular responses to stress; Chronic myeloid leukemia; Cyclin D associated events in G1; DNA damage response (only ATM dependent); G1 Phase; G1 to S cell cycle control; Glioma; HTLV-I infection; Melanoma; MicroRNAs in cancer; Mitotic G1-G1/S phases; Non-small cell lung cancer; Oncogene Induced Senescence; Oxidative Stress Induced Senescence; Pancreatic cancer; Pathways in cancer; Senescen
Function	DNA binding; MDM2/MDM4 family protein binding; NF-kappaB binding; cyclin-dependent

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protein serine/threonine kinase inhibitor activity; p53 binding; poly(A) RNA binding; protein binding; protein kinase binding; transcription factor binding; ubiquitin-protein transferase inhibitor activity

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