



# Human CDKN2A blocking peptide (CDBP2159)

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

## PRODUCT INFORMATION

<b>Product Overview</b>	Blocking/Immunizing peptide for anti-CDKN2A (isoform 3) antibody
<b>Antigen Description</b>	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]
<b>Species</b>	Human
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	Apuri, BL, ELISA
<b>Format</b>	Lyophilized powder
<b>Size</b>	100 µg
<b>Preservative</b>	None
<b>Storage</b>	Shipped at ambient temperature, store at -20°C.

## GENE INFORMATION

<b>Gene Name</b>	<a href="#">CDKN2A cyclin-dependent kinase inhibitor 2A [ Homo sapiens (human) ]</a>
<b>Official Symbol</b>	CDKN2A
<b>Synonyms</b>	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; 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);
<b>Entrez Gene ID</b>	<a href="#">1029</a>
<b>mRNA Refseq</b>	<a href="#">NM_000077.4</a>
<b>Protein Refseq</b>	<a href="#">NP_000068.1</a>
<b>UniProt ID</b>	K7PML8
<b>Chromosome Location</b>	9p21
<b>Pathway</b>	Apoptosis, organism-specific biosystem; Apoptosis Modulation and Signaling, organism-specific biosystem; Bladder cancer, organism-specific biosystem; Bladder cancer, conserved biosystem; Cell Cycle, organism-specific biosystem; Cell Cycle, Mitotic, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, organism-specific biosystem; Cell cycle, conserved biosystem; Cellular Senescence, organism-specific biosystem; Cellular responses to stress, organism-specific biosystem
<b>Function</b>	DNA binding; MDM2/MDM4 family protein binding; NF-kappaB binding; cyclin-dependent protein serine/threonine kinase inhibitor activity; p53 binding; poly(A) RNA binding; protein binding; protein kinase binding; transcription factor binding; ubiquitin-prote