CDKN1A Peptide - N-Terminal Region Blocking Peptide

PRODUCT OVERVIEW

Product Name	CDKN1A, Blocking Peptide
Full Product Name	CDKN1A Peptide - N-terminal region
Product Gene Name	CDKN1A blocking peptide
Product Synonym Gene Name	CAP20; CDKN1; CIP1; MDA-6; P21; SDI1; WAF1; p21CIP1
Sequence	Synthetic peptide located within the following region: KACRRLFGPV DSEQLSRDCD ALMAGCIQEA RERWNFDFVT ETPLEGDFAW
Species Reactivity	Human
Form/Format	Lyophilized powder
Preparation and Storage	Add 100ul of sterile PBS. Final peptide concentration is 1 mg/ml in PBS. For longer periods of storage, store at -20 degree C. Avoid repeat freeze-thaw cycles.
Antibody/Peptide Pairs	CDKN1A peptide (MBS3224902) is used for blocking the activity of CDKN1A antibody (MBS3200191)
Molecular Weight	18kDa
OMIM	116899
Product Categories/Family for CDKN1A blocking peptide	Peptide
Applications Tested/Suitable for CDKN1A blocking peptide	Immunohistochemistry (IHC), Western Blot (WB)
Related Product Information for CDKN1A blocking peptide	This is a synthetic peptide designed for use in combination with anti-CDKN1A Antibody, made Target Description: This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-CDK2 or -CDK4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen (PCNA), a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of CDK2, and may be instrumental in the execution of apoptosis following caspase activation. Multiple alternatively spliced variants have been found for this gene.
Other Notes	Small volumes of CDKN1A blocking peptide vial(s) may occasionally become entrapped in the seal of the product vial during shipment and storage. If necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the container`s cap. Certain products may require to ship with dry ice and additional dry ice fee may apply.
Searchable Terms for CDKN1A purchase	MBS3224902 is a blocking peptide targeting CDKN1A. Also known as CDKN1A Peptide - N-terminal region. Reactive in Human.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for CDKN1A. It may not necessarily be applicable to this product.

NCBI GI #	17978495
NCBI GeneID	1026
NCBI Accession #	NP_510867

UniProt Primary Accession #	Q6FI05
UniProt Related Accession #	P38936
GenBank Nucleotide #	NM_078467
NCBI Official Full Name	cyclin-dependent kinase inhibitor 1 isoform 1
NCBI Official Synonym Full Names	cyclin dependent kinase inhibitor 1A
NCBI Official Symbol	CDKN1A
NCBI Official Synonym Symbols	P21; CIP1; SDI1; WAF1; CAP20; CDKN1; MDA-6; p21CIP1
UniProt Protein Name	Cyclin-dependent kinase inhibitor 1
UniProt Synonym Protein Names	CDK-interacting protein 1; Melanoma differentiation-associated protein 6; MDA-6; p21
Protein Family	Cip1-interacting zinc finger protein
UniProt Gene Name	CDKN1A
UniProt Synonym Gene Names	CAP20; CDKN1; CIP1; MDA6; PIC1; SDI1; WAF1; MDA-6
UniProt Entry Name	CDN1A_HUMAN
NCBI Protein Information	cyclin-dependent kinase inhibitor 1
NCBI Summary for CDKN1A	This gene encodes a potent cyclin-dependent kinase inhibitor. The encoded protein binds to and inhibits the activity of cyclin-cyclin-dependent kinase2 or -cyclin-dependent kinase4 complexes, and thus functions as a regulator of cell cycle progression at G1. The expression of this gene is tightly controlled by the tumor suppressor protein p53, through which this protein mediates the p53-dependent cell cycle G1 phase arrest in response to a variety of stress stimuli. This protein can interact with proliferating cell nuclear antigen, a DNA polymerase accessory factor, and plays a regulatory role in S phase DNA replication and DNA damage repair. This protein was reported to be specifically cleaved by CASP3-like caspases, which thus leads to a dramatic activation of cyclin-dependent kinase2, and may be instrumental in the execution of apoptosis following caspase activation. Mice that lack this gene have the ability to regenerate damaged or missing tissue. Multiple alternatively spliced variants have been found for this gene. [provided by RefSeq, Sep 2015]
Research Articles on CDKN1A	**1.** RBMS2 acts as a tumor suppressor in breast cancer and positively regulated the expression of P21 by stabilizing its mRNA.
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