



## CDKN1A blocking peptide (DAG-P1746)

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

### PRODUCT INFORMATION

<b>Antigen Description</b>	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. [provided by RefSeq, Nov 2010]
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<b>Specificity</b>	Expressed in all adult human tissues, with 5-fold lower levels observed in the brain.
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	BL
<b>Sequence Similarities</b>	Belongs to the CDI family.
<b>Format</b>	Liquid
<b>Buffer</b>	PBS with 100ug BSA 0.1% sodium azide
<b>Preservative</b>	0.1% Sodium Azide
<b>Storage</b>	Store at +4°C. PBS with 100ug BSA 0.1% sodium azide

### GENE INFORMATION

<b>Gene Name</b>	<a href="#">CDKN1A cyclin-dependent kinase inhibitor 1A (p21, Cip1) [ Homo sapiens (human) ]</a>
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<b>Official Symbol</b>	CDKN1A
<b>Synonyms</b>	CDKN1A; cyclin-dependent kinase inhibitor 1A (p21, Cip1); P21; CIP1; SDI1; WAF1; CAP20; CDKN1; MDA-6; p21CIP1; cyclin-dependent kinase inhibitor 1; DNA synthesis inhibitor; CDK-interacting protein 1; CDK-interaction protein 1; wild-type p53-activated fragment 1; melanoma differentiation associated protein 6;
<b>Entrez Gene ID</b>	<a href="#">1026</a>
<b>mRNA Refseq</b>	<a href="#">NM_000389.4</a>
<b>Protein Refseq</b>	<a href="#">NP_000380.1</a>
<b>UniProt ID</b>	P38936
<b>Chromosome Location</b>	6p21.2
<b>Pathway</b>	AKT phosphorylates targets in the cytosol, organism-specific biosystem; AMPK signaling, organism-specific biosystem; Adaptive Immune System, organism-specific biosystem; Adipogenesis, organism-specific biosystem; AhR pathway, organism-specific biosystem; Alpha6-Beta4 Integrin Signaling Pathway, organism-specific biosystem; Androgen receptor signaling pathway, organism-specific biosystem; Angiopoietin receptor Tie2-mediated signaling, organism-specific biosystem; Bladder cancer, organism-specific
<b>Function</b>	cyclin binding; cyclin-dependent protein kinase activating kinase activity; cyclin-dependent protein serine/threonine kinase inhibitor activity; metal ion binding; protein binding; protein complex binding;