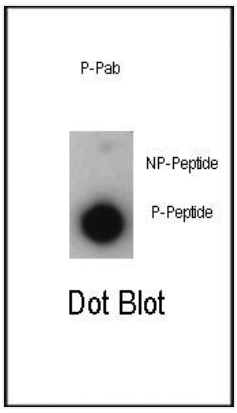
p21 Antibody – Rabbit Polyclonal

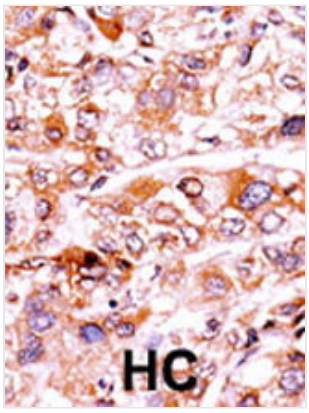
PRODUCT OVERVIEW

Product Name	p21, Polyclonal Antibody
Full Product Name	p21, Phosphorylated (Thr57) (Cyclin-dependent Kinase Inhibitor 1, CDK-interacting Protein 1, Melanoma Differentiation-associated Protein 6, MDA-6, CDKN1A, CAP20, CDKN1, CIP1, MDA6, PIC1, SDI1, WAF1) (APC)
Product Gene Name	anti-p21 antibody
Clonality	Polyclonal
Isotype	IgG
Host	Rabbit
Species Reactivity	Human
Form/Format	Supplied as a liquid in PBS, pH 7.2. No preservative added. Labeled with Allophycocyanin (APC).
Purity/Purification	Purified by Immunoaffinity chromatography.
Specificity	Recognizes human P21CIP1 when phosphorylated at Thr57.
Preparation and Storage	May be stored at 4 degree C for short-term only. Aliquot to avoid repeated freezing and thawing. Do not freeze APC conjugates. Light sensitive. Aliquots are stable for at least 6 months. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap.
Molecular Weight	20.2 kDa (184aa)
OMIM	116899
3D Structure	ModBase 3D Structure for P38936
Immunogen	Synthetic phosphopeptide corresponding to amino acid residues surrounding Thr57 of human P21CIP1 (KLH).
Conjugate	APC
Antigen Modification	Phosphorylated
Note	Preservative Free
Special Handling	Light sensitive
Product Categories/Family for anti-p21 antibody	Antibodies; Cancer Markers
Applications Tested/Suitable for anti-p21 antibody	FLISA, Dot Blot (DB), Immunohistochemistry (IHC)
Application Notes for anti-p21 antibody	FLISA: 1:1,000 Dot Blot: 1:500 IHC: 1:50-1:100 Applications are based on unconjugated antibody.
Related Product Information for anti-p21 antibody	MBS6491296 is an antibody targeting p21. Also known as p21, Phosphorylated (Thr57) (Cyclin-dependent Kinase Inhibitor 1, CDK-interacting Protein 1, Melanoma Differentiation-associated Protein 6, MDA-6, CDKN1A, CAP20, CDKN1, CIP1, MDA6, PIC1, SDI1, WAF1) (APC). Reactive in Human. Host: Rabbit.
Product References and Citations for anti-p21 antibody	1. Scott, S.A., et al., Leuk. Res. 28(12):1293-1301 (2004). 2. Amini, S., et al., J. Biol. Chem. 279(44):46046-46056 (2004). 3. Chen, T., et al., Cancer Res. 64(20):7412-7419 (2004). 4. Sieburg, M., et al., J. Virol. 78(19):10399-10409 (2004). 5. Giraud, S., et al., Oncogene 23(44):7391-7398 (2004).

Other Notes	Small volumes of anti-p21 antibody 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.



Dot Blot (DB) of anti-p21 antibody
Dot blot analysis of anti-Phospho-P21CIP1-T57 Antibody on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.



Immunohistochemistry (IHC) of anti-p21 antibody
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

ADDITIONAL DETAILS

NCBI/Uniprot data below describe general gene information for p21. It may not necessarily be applicable to this product.

NCBI GI #	11386203
NCBI GeneID	1026
NCBI Accession #	NP_000380
UniProt Primary Accession #	P38936
UniProt Secondary Accession #	Q14010; Q6FI05; Q9BUT4
UniProt Related Accession #	P38936
GenBank Nucleotide #	NM_000389.4
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	p21-activated protein kinase-interacting 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 p21	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]
UniProt Comments for p21	p21Cip1: a cell-cycle regulatory protein that Interacts with cyclin-CDK2 and -CDK4, inhibiting cell cycle progression at G1. Its expression is tightly controlled by p53, through which this protein mediates the p53-dependent cell cycle arrest at G1 phase. Protein type: Inhibitor; Cell cycle regulation Chromosomal Location of Human Ortholog: 6p21.2 Cellular Component: nucleoplasm; intracellular membrane-bound organelle; perinuclear region of cytoplasm; cyclin-dependent protein kinase holoenzyme complex; nucleus; cytosol Molecular Function: cyclin-dependent protein kinase inhibitor activity; cyclin binding; protein binding; cyclin-dependent protein kinase activating kinase activity; metal ion binding; ubiquitin protein ligase binding; protein complex binding Biological Process: nerve growth factor receptor signaling pathway; response to arsenic; response to toxin; DNA damage response, signal transduction by p53 class mediator resulting in cell cycle arrest; protein amino acid phosphorylation; negative regulation of cell proliferation; positive regulation of fibroblast proliferation; positive regulation of B cell proliferation; G2/M transition of mitotic cell cycle; cell cycle arrest; DNA damage response, signal transduction by p53 class mediator resulting in induction of apoptosis; response to corticosterone stimulus; response to X-ray; response to drug; epidermal growth factor receptor signaling pathway; organ regeneration; fibroblast growth factor receptor signaling pathway; phosphoinositide-mediated signaling; negative regulation of cyclin-dependent protein kinase activity; response to organic nitrogen; positive regulation of programmed cell death; response to hyperoxia; positive regulation of protein kinase activity; Ras protein signal transduction; cellular response to extracellular stimulus; regulation of protein import into nucleus, translocation; innate immune response; negative regulation of phosphorylation; mitotic cell cycle; regulation of cyclin-dependent protein kinase activity; negative regulation of cell growth; response to DNA damage stimulus; negative regulation of apoptosis; G1/S transition of mitotic cell cycle
Research Articles on p21	**1.** Results show that p21 expression is downregulated by LincRNAFEZF1-AS1 which epigenetically repress the expression of P21 via binding with LSD1.
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