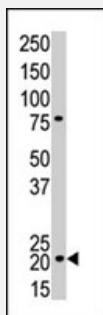


CDKN1A polyclonal antibody

Catalog # PAB2922

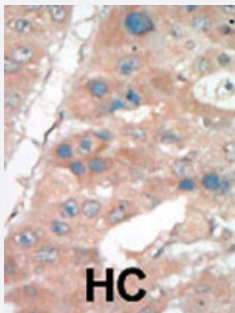
Size 400 uL

Applications



Western Blot (Cell lysate)

The CDKN1A polyclonal antibody (Cat # PAB2922) is used in Western blot to detect CDKN1A in T-47D cell lysate.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Formalin-fixed and paraffin-embedded human hepatocellular carcinoma tissue reacted with CDKN1A polyclonal antibody (Cat # PAB2922), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. HC = hepatocarcinoma.

Specification

Product Description	Rabbit polyclonal antibody raised against synthetic peptide of CDKN1A.
Immunogen	A synthetic peptide (conjugated with KLH) corresponding to C-terminus of human CDKN1A.
Host	Rabbit
Reactivity	Human
Form	Liquid
Purification	Protein G purification

Recommend Usage	Western Blot (1:1000) Immunohistochemistry (1:50-100) The optimal working dilution should be determined by the end user.
Storage Buffer	In PBS (0.09% sodium azide)
Storage Instruction	Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

Applications

- Western Blot (Cell lysate)

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Gene Info — CDKN1A

Entrez GeneID	1026
Protein Accession#	P38936
Gene Name	CDKN1A
Gene Alias	CAP20, CDKN1, CIP1, MDA-6, P21, SDI1, WAF1, p21CIP1
Gene Description	cyclin-dependent kinase inhibitor 1A (p21, Cip1)
Omim ID	116899
Gene Ontology	Hyperlink

Gene Summary

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. Two alternatively spliced variants, which encode an identical protein, have been reported. [provided by RefSeq]

Other Designations

CDK-interaction protein 1|DNA synthesis inhibitor|OTTHUMP00000016298|cyclin-dependent kinase inhibitor 1A|melanoma differentiation associated protein 6|wild-type p53-activated fragment 1

Publication Reference

- [The association of cyclin A and cyclin kinase inhibitor p21 in response to gamma-irradiation requires the CDK2 binding region, but not the Cy motif.](#)

Fukuchi K, Nakamura K, Ichimura S, Tatsumi K, Gomi K.

Biochimica et Biophysica Acta 2003 Oct; 1642(3):163.

Application: WB, Human, DLD-1 cells

- [Human proliferating cell nuclear antigen, poly\(ADP-ribose\) polymerase-1, and p21waf1/cip1. A dynamic exchange of partners.](#)

Frouin I, Maga G, Denegri M, Riva F, Savio M, Spadari S, Prosperi E, Scovassi AI.

The Journal of Biological Chemistry 2003 Oct; 278(41):39265.

Application: IP, WB, Human, Human fibroblasts

- [The cyclin-dependent kinase inhibitor p21CIP/WAF is a positive regulator of insulin-like growth factor I-induced cell proliferation in MCF-7 human breast cancer cells.](#)

Dupont J, Karas M, LeRoith D.

The Journal of Biological Chemistry 2003 Sep; 278(39):37256.

Application: WB, Human, MCF-7, T47D cells

Pathway

- [Bladder cancer](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)

- [ErbB signaling pathway](#)
- [Glioma](#)
- [Melanoma](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Colorectal Neoplasms](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [DNA Damage](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)

- [Glaucoma](#)
- [Glioma](#)
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- [Helicobacter Infections](#)
- [Intestinal Neoplasms](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Leiomyoma](#)
- [Leukemia](#)
- [Low Tension Glaucoma](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lymphoma](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 1](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroma](#)

- [Occupational Diseases](#)
- [Ocular Hypertension](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Papillomavirus Infections](#)
- [Pharyngeal Neoplasms](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Radiation Injuries](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Neoplasms](#)