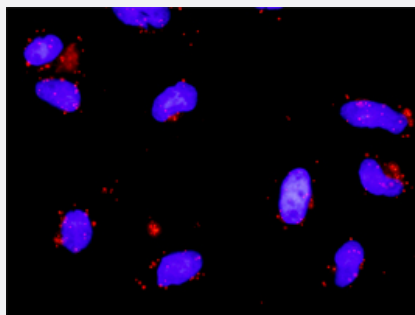


CDKN1A & MDM2 Protein Protein Interaction Antibody Pair

Catalog # DI0273

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CDKN1A and MDM2. HeLa cells were stained with anti-CDKN1A rabbit purified polyclonal antibody 1:1200 and anti-MDM2 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description

This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the CDKN1A protein, and the other against the MDM2 protein for use in [in situ Proximity Ligation Assay](#). [See Publication Reference below](#).

Reactivity

Human

Quality Control Testing

Protein protein interaction immunofluorescence result.
Representative image of Proximity Ligation Assay of protein-protein interactions between CDKN1A and MDM2. HeLa cells were stained with anti-CDKN1A rabbit purified polyclonal antibody 1:1200 and anti-MDM2 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Supplied Product

Antibody pair set content:
1. CDKN1A rabbit purified polyclonal antibody (100 ug)
2. MDM2 mouse monoclonal antibody (40 ug)
*Reagents are sufficient for at least 30-50 assays using recommended protocols.

Storage Instruction

Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze-thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

- *In situ* Proximity Ligation Assay (Cell)

Gene Info — CDKN1A

Entrez GeneID [1026](#)

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

Gene Info — MDM2

Entrez GeneID [4193](#)

Gene Name MDM2

Gene Alias HDMX, MGC71221, hdm2

Gene Description Mdm2 p53 binding protein homolog (mouse)

Omim ID [164785](#)

Gene Ontology [Hyperlink](#)

Gene Summary

This gene is a target gene of the transcription factor tumor protein p53. The encoded protein is a nuclear phosphoprotein that binds and inhibits transactivation by tumor protein p53, as part of an autoregulatory negative feedback loop. Overexpression of this gene can result in excessive inactivation of tumor protein p53, diminishing its tumor suppressor function. This protein has E3 ubiquitin ligase activity, which targets tumor protein p53 for proteasomal degradation. This protein also affects the cell cycle, apoptosis, and tumorigenesis through interactions with other proteins, including retinoblastoma 1 and ribosomal protein L5. More than 40 different alternatively spliced transcript variants have been isolated from both tumor and normal tissues. [provided by RefSeq]

Other Designations

Mdm2, transformed 3T3 cell double minute 2, p53 binding protein|double minute 2, human homolog of; p53-binding protein|mouse double minute 2 homolog|p53-binding protein MDM2|ubiquitin-protein ligase E3 Mdm2

Pathway

- [Bladder cancer](#)
- [Bladder cancer](#)
- [Cell cycle](#)
- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [Chronic myeloid leukemia](#)
- [Endocytosis](#)
- [ErbB signaling pathway](#)
- [Glioma](#)
- [Glioma](#)
- [Melanoma](#)
- [Melanoma](#)
- [p53 signaling pathway](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)

- [Prostate cancer](#)
- [Ubiquitin mediated proteolysis](#)

Disease

- [Abortion](#)
- [Acquired Hyperostosis Syndrome](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenocarcinoma](#)
- [Anoxia](#)
- [Arthritis](#)
- [Asthma](#)
- [Ataxia telangiectasia](#)
- [Atherosclerosis](#)
- [Brain Neoplasms](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Diseases](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)

- [Cervical Intraepithelial Neoplasia](#)
- [Choroid Plexus Neoplasms](#)
- [Chromosome Aberrations](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)
- [Chronic Disease](#)
- [Cocarcinogenesis](#)
- [Colon cancer](#)
- [Colorectal Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Constriction](#)
- [Critical Illness](#)
- [Crohn Disease](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [DNA Damage](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Fallopian Tube Neoplasms](#)
- [Fibrosis](#)
- [Genetic Predisposition to Disease](#)

- [Genetic Predisposition to Disease](#)
- [Genital Neoplasms](#)
- [Glaucoma](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hepatitis](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hodgkin Disease](#)
- [Inflammation](#)
- [Intestinal Neoplasms](#)
- [Kidney Failure](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leiomyoma](#)
- [Leukemia](#)
- [Leukemia](#)
- [Leukoplakia](#)

- [Li-Fraumeni Syndrome](#)
- [Liver Neoplasms](#)
- [Low Tension Glaucoma](#)
- [Lung Neoplasms](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lupus Nephritis](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malignant melanoma](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Melanoma](#)
- [Meningioma](#)
- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Mouth Neoplasms](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 1](#)
- [Myocardial Infarction](#)
- [Nasopharyngeal Neoplasms](#)
- [Nasopharyngeal Neoplasms](#)

- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplasms](#)
- [Neuroblastoma](#)
- [Neuroma](#)
- [Neuroma](#)
- [Occupational Diseases](#)
- [Occupational Diseases](#)
- [Ocular Hypertension](#)
- [Oligodendroglioma](#)
- [Osteosarcoma](#)
- [Ovarian cancer](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pancreatic Neoplasms](#)
- [Papilloma](#)
- [Papillomavirus Infections](#)
- [Papillomavirus Infections](#)

- [Peritoneal Neoplasms](#)
- [Pharyngeal Neoplasms](#)
- [Pharyngeal Neoplasms](#)
- [Precancerous Conditions](#)
- [Prostate cancer](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Prostatic Neoplasms](#)
- [Psoriasis](#)
- [Pulmonary Disease](#)
- [Pulmonary Disease](#)
- [Radiation Injuries](#)
- [Recurrence](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Sepsis](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Stomach Neoplasms](#)
- [The p53 tumor suppressor protein](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Uterine Cervical Neoplasms](#)

- [Uterine Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Wegener Granulomatosis](#)
- [Werner syndrome](#)