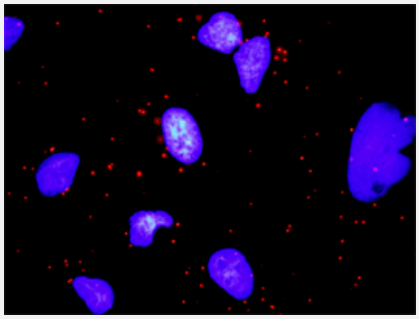
CASP3 & MDM2 Protein Protein Interaction Antibody Pair

Catalog # DI0374 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CASP3 and MDM2. HeLa cells were stained with anti-CASP3 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 CASP3 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 CASP3 and MDM2. HeLa cells were stained with anti-CASP3 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. CASP3 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 — CASP3

Entrez GeneID	836
Gene Name	CASP3
Gene Alias	CPP32, CPP32B, SCA-1
Gene Description	caspase 3, apoptosis-related cysteine peptidase
Omim ID	600636
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a protein which is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein cleaves and activates caspases 6, 7 and 9, and the protein itself is processed by caspases 8, 9 and 10. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimer's disease. Alternative splicing of this gene results in two transcript variants that encode the same protein. [provided by RefSeq
Other Designations	OTTHUMP00000165054|PARP cleavage protease|SREBP cleavage activity 1|Yama|apopain|caspase 3|caspase 3, apoptosis-related cysteine protease|cysteine protease CPP32|procaspase3

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 inacti vation of tumor protein p53, diminishing its tumor suppressor function. This protein has E3 ubiquiti n ligase activity, which targets tumor protein p53 for proteasomal degradation. This protein also af fects the cell cycle, apoptosis, and tumorigenesis through interactions with other proteins, includin g retinoblastoma 1 and ribosomal protein L5. More than 40 different alternatively spliced transcrip t 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 homol og of; p53-binding protein|mouse double minute 2 homolog|p53-binding protein MDM2|ubiquitin-p rotein ligase E3 Mdm2

Pathway

- Amyotrophic lateral sclerosis (ALS)
- Apoptosis
- Bladder cancer
- Cell cycle
- Chronic myeloid leukemia
- Colorectal cancer
- Endocytosis
- Epithelial cell signaling in Helicobacter pylori infection
- Glioma
- MAPK signaling pathway
- Melanoma
- Natural killer cell mediated cytotoxicity
- p53 signaling pathway
- p53 signaling pathway
- Pathways in cancer
- Pathways in cancer
- Prostate cancer

- Ubiquitin mediated proteolysis

Disease

- Abortion
- Acquired Hyperostosis Syndrome
- Acute Disease
- Adenocarcinoma
- Adenocarcinoma
- Anoxia
- Arthritis
- Asthma
- Attention Deficit Disorder with Hyperactivity
- Autistic Disorder
- Brain Neoplasms
- Breast cancer
- Breast Diseases
- Breast Neoplasms
- Carcinoma
- Carcinoma
- Cardiovascular Diseases
- Cardiovascular Diseases
- Cell Transformation
- Cervical Intraepithelial Neoplasia
- Choroid Plexus Neoplasms
- Chromosome Aberrations
- Chronic Disease

- Clubfoot
- Cocarcinogenesis
- Colon cancer
- Colorectal Neoplasms
- Colorectal Neoplasms
- Constriction
- Critical Illness
- Crohn Disease
- Diabetes Mellitus
- Diabetic Nephropathies
- Disease Progression
- Disease Progression
- Disease Susceptibility
- DNA Damage
- Edema
- Endometrial Neoplasms
- Endometrial Neoplasms
- Esophageal Neoplasms
- Esophageal Neoplasms
- Fallopian Tube Neoplasms
- Fibrosis
- Gastrointestinal Stromal Tumors
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Genital Neoplasms
- Glioblastoma

- Glioma
- Head and Neck Neoplasms
- Head and Neck Neoplasms
- Helicobacter Infections
- Hematologic Diseases
- Hematologic Diseases
- Hepatitis
- Hepatitis B
- Hepatitis C
- Hodgkin Disease
- Hodgkin Disease
- Inflammation
- Kidney Failure
- Kidney Failure
- Kidney Neoplasms
- Laryngeal Neoplasms
- Leukemia
- Leukemia
- Leukoplakia
- Li-Fraumeni Syndrome
- Liver Neoplasms
- Lung carcinoma
- Lung Neoplasms
- Lung Neoplasms
- Lupus Erythematosus
- Lupus Nephritis

- Lymphatic Metastasis
- Lymphatic Metastasis
- Lymphoma
- Lymphoma
- Lymphoproliferative Disorders
- Lymphoproliferative Disorders
- Malignant melanoma
- Melanoma
- Meningioma
- Mouth Neoplasms
- Mucocutaneous Lymph Node Syndrome
- Multiple Myeloma
- Multiple Sclerosis
- NARP
- Nasopharyngeal Neoplasms
- Neoplasm Metastasis
- Neoplasm Metastasis
- Neoplasm Recurrence
- Neoplasms
- Neoplasms
- Neovascularization
- Neuroblastoma
- Neuroma
- Occupational Diseases
- Occupational Diseases
- Oligodendroglioma

- Osteosarcoma
- Ovarian cancer
- Ovarian Neoplasms
- Pancreatic cancer
- Pancreatic Neoplasms
- Papilloma
- Papillomavirus Infections
- Peritoneal Neoplasms
- Pharyngeal Neoplasms
- Prostate cancer
- Prostatic Neoplasms
- Prostatic Neoplasms
- Psoriasis
- Pulmonary Disease
- Pulmonary Disease
- Recurrence
- Retinal Neoplasms
- Retinoblastoma
- Sepsis
- Skin Neoplasms
- Small Cell Lung Carcinoma
- Stomach Neoplasms
- Stomach Neoplasms

- The p53 tumor suppressor protein
- Urinary Bladder Neoplasms

- Urinary Bladder Neoplasms
- Uterine Cervical Neoplasms
- Waldenstrom Macroglobulinemia
- Waldenstrom Macroglobulinemia
- Wegener Granulomatosis
- Werner syndrome
- Werner syndrome