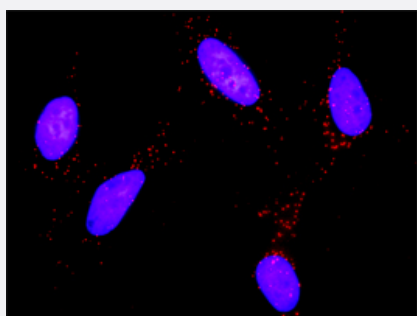


AKT1 & MDM2 Protein Protein Interaction Antibody Pair

Catalog # DI0291

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between AKT1 and MDM2. HeLa cells were stained with anti-AKT1 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 AKT1 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 AKT1 and MDM2. HeLa cells were stained with anti-AKT1 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. AKT1 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 — AKT1

Entrez GeneID	207
Gene Name	AKT1
Gene Alias	AKT, MGC99656, PKB, PKB-ALPHA, PRKBA, RAC, RAC-ALPHA
Gene Description	v-akt murine thymoma viral oncogene homolog 1
Omim ID	164730 181500
Gene Ontology	Hyperlink
Gene Summary	The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq]
Other Designations	RAC-alpha serine/threonine-protein kinase murine thymoma viral (v-akt) oncogene homolog-1 protein kinase B rac protein kinase alpha

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

- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Apoptosis](#)
- [B cell receptor signaling pathway](#)
- [Bladder cancer](#)
- [Cell cycle](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Endocytosis](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Glioma](#)

- [Glioma](#)
- [Insulin signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [Melanoma](#)
- [mTOR signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Prostate cancer](#)
- [Renal cell carcinoma](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)
- [Toll-like receptor signaling pathway](#)
- [Ubiquitin mediated proteolysis](#)
- [VEGF signaling pathway](#)

Disease

- [Abortion](#)
- [Acquired Hyperostosis Syndrome](#)

- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Amphetamine-Related Disorders](#)
- [Anoxia](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Basal Ganglia Diseases](#)
- [Bipolar Disorder](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Diseases](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Cervical Intraepithelial Neoplasia](#)
- [Choroid Plexus Neoplasms](#)
- [Chromosome Aberrations](#)
- [Chronic Disease](#)

- [Cocarcinogenesis](#)
- [Cognition](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Constriction](#)
- [Coronary Artery Disease](#)
- [Critical Illness](#)
- [Crohn Disease](#)
- [Depressive Disorder](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Dominance](#)
- [Drug Toxicity](#)
- [Dyskinesia](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)

- [Esophageal Neoplasms](#)
- [Fallopian Tube Neoplasms](#)
- [Fibrosis](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genital Neoplasms](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Hematologic Diseases](#)
- [Hepatitis](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Inflammation](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)
- [Leukemia](#)
- [Leukemia](#)
- [Leukoplakia](#)
- [Li-Fraumeni Syndrome](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)

- [Lung Neoplasms](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lupus Nephritis](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Memory](#)
- [Meningioma](#)
- [Metabolic Syndrome X](#)
- [Mouth Neoplasms](#)
- [Nasopharyngeal Neoplasms](#)
- [Necrosis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplasms](#)
- [Neuroblastoma](#)
- [Neuroma](#)
- [Neuropsychological Tests](#)
- [Obesity](#)

- [Occupational Diseases](#)
- [Oligodendroglioma](#)
- [Osteoporosis](#)
- [Osteosarcoma](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Papilloma](#)
- [Papillomavirus Infections](#)
- [Parkinson disease](#)
- [Peritoneal Neoplasms](#)
- [Pharyngeal Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Precursor T-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Prostatic Neoplasms](#)
- [Psoriasis](#)
- [Psychiatric Status Rating Scales](#)
- [Psychoses](#)
- [Psychotic Disorders](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Pulmonary Disease](#)

- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Retinal Neoplasms](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Retinoblastoma](#)
- [Schizophrenia](#)
- [Sepsis](#)
- [Skin Neoplasms](#)
- [Space Perception](#)
- [Stomach Neoplasms](#)
- [The p53 tumor suppressor protein](#)
- [Thrombophilia](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Verbal Learning](#)
- [Waldenstrom Macroglobulinemia](#)
- [Wegener Granulomatosis](#)
- [Werner syndrome](#)
- [Werner syndrome](#)