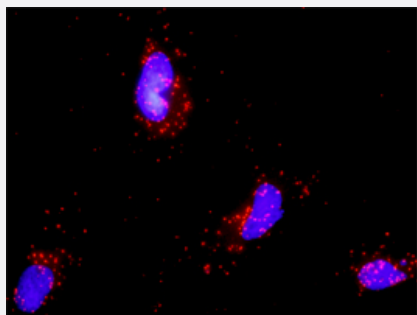


PDGFRB & PTEN Protein Protein Interaction Antibody Pair

Catalog # DI0425

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between PDGFRB and PTEN. HeLa cells were stained with anti-PDGFRB rabbit purified polyclonal antibody 1:1200 and anti-PTEN 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 PDGFRB protein, and the other against the PTEN 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 PDGFRB and PTEN. HeLa cells were stained with anti-PDGFRB rabbit purified polyclonal antibody 1:1200 and anti-PTEN 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. PDGFRB rabbit purified polyclonal antibody (100 ug)
2. PTEN 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 — PDGFRB

Entrez GeneID	5159
Gene Name	PDGFRB
Gene Alias	CD140B, JTK12, PDGF-R-beta, PDGFR, PDGFR1
Gene Description	platelet-derived growth factor receptor, beta polypeptide
Omim ID	131440 173410
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived growth factor family. These growth factors are mitogens for cells of mesenchymal origin. The identity of the growth factor bound to a receptor monomer determines whether the functional receptor is a homodimer or a heterodimer, composed of both platelet-derived growth factor receptor alpha and beta polypeptides. This gene is flanked on chromosome 5 by the genes for granulocyte-macrophage colony-stimulating factor and macrophage-colony stimulating factor receptor; all three genes may be implicated in the 5-q syndrome. A translocation between chromosomes 5 and 12, that fuses this gene to that of the translocation, ETV6, leukemia gene, results in chronic myeloproliferative disorder with eosinophilia. [provided by RefSeq]
Other Designations	beta platelet-derived growth factor receptor platelet-derived growth factor receptor beta soluble PDGFRb variant 1

Gene Info — PTEN

Entrez GeneID	5728
Gene Name	PTEN
Gene Alias	10q23del, BZS, MGC11227, MHAM, MMAC1, PTEN1, TEP1
Gene Description	phosphatase and tensin homolog
Omim ID	137800 153480 158350 174900 176807 176920 188470 276950 601728 605309 607174
Gene Ontology	Hyperlink

Gene Summary

This gene was identified as a tumor suppressor that is mutated in a large number of cancers at high frequency. The protein encoded this gene is a phosphatidylinositol-3,4,5-trisphosphate 3-phosphatase. It contains a tensin like domain as well as a catalytic domain similar to that of the dual specificity protein tyrosine phosphatases. Unlike most of the protein tyrosine phosphatases, this protein preferentially dephosphorylates phosphoinositide substrates. It negatively regulates intracellular levels of phosphatidylinositol-3,4,5-trisphosphate in cells and functions as a tumor suppressor by negatively regulating AKT/PKB signaling pathway. [provided by RefSeq]

Other Designations

MMAC1 phosphatase and tensin homolog deleted on chromosome 10[OTTHUMP00000020032] mutated in multiple advanced cancers 1

Pathway

- [Calcium signaling pathway](#)
- [Colorectal cancer](#)
- [Cytokine-cytokine receptor interaction](#)
- [Endometrial cancer](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Gap junction](#)
- [Glioma](#)
- [Glioma](#)
- [Inositol phosphate metabolism](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [Melanoma](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Phosphatidylinositol signaling system](#)
- [Prostate cancer](#)

- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Small cell lung cancer](#)
- [Tight junction](#)

Disease

- [Abnormalities](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Alzheimer disease](#)
- [Astrocytoma](#)
- [Autistic Disorder](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Craniofacial Abnormalities](#)

- [Developmental Disabilities](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Disease Progression](#)
- [Ductus Arteriosus](#)
- [Edema](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Hamartoma Syndrome](#)
- [Hyperparathyroidism](#)
- [Hyperplasia](#)
- [Infant](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Learning Disorders](#)
- [Leukemia](#)
- [Lung Neoplasms](#)

- [Lupus Erythematosus](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mental Retardation](#)
- [Metabolic Syndrome X](#)
- [Microsatellite Instability](#)
- [Narcolepsy](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplasms](#)
- [Neuroma](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precursor T-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Proteus Syndrome](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Retinal Neoplasms](#)

- [Retinoblastoma](#)
- [Schizophrenia](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Subdural Effusion](#)
- [Syndrome](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)