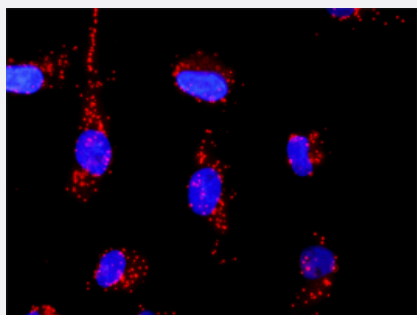


PTK2 & PTEN Protein Protein Interaction Antibody Pair

Catalog # DI0445

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between PTK2 and PTEN. Mahlavu cells were stained with anti-PTK2 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 PTK2 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 PTK2 and PTEN. Mahlavu cells were stained with anti-PTK2 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. PTK2 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 — 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

Gene Info — PTK2

Entrez GeneID [5747](#)

Gene Name PTK2

Gene Alias FADK, FAK, FAK1, pp125FAK

Gene Description PTK2 protein tyrosine kinase 2

Omim ID [600758](#)

Gene Ontology [Hyperlink](#)

Gene Summary

This gene encodes a cytoplasmic protein tyrosine kinase which is found concentrated in the focal adhesions that form between cells growing in the presence of extracellular matrix constituents. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence similarity to kinases from other subfamilies. Activation of this gene may be an important early step in cell growth and intracellular signal transduction pathways triggered in response to certain neural peptides or to cell interactions with the extracellular matrix. At least four transcript variants encoding four different isoforms have been found for this gene, but the full-length nature of only two of them have been determined. [provided by RefSeq]

Other Designations

focal adhesion kinase 1

Pathway

- [Axon guidance](#)
- [Chemokine signaling pathway](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Glioma](#)
- [Inositol phosphate metabolism](#)
- [Leukocyte transendothelial migration](#)
- [Melanoma](#)
- [p53 signaling pathway](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Phosphatidylinositol signaling system](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Small cell lung cancer](#)
- [Small cell lung cancer](#)

- [Tight junction](#)
- [VEGF signaling pathway](#)

Disease

- [Abnormalities](#)
- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Astrocytoma](#)
- [Autistic Disorder](#)
- [Autistic Disorder](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Craniofacial Abnormalities](#)
- [Developmental Disabilities](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Ductus Arteriosus](#)
- [Edema](#)

- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Hamartoma Syndrome](#)
- [HIV Infections](#)
- [Hyperplasia](#)
- [Infant](#)
- [Insulin Resistance](#)
- [Learning Disorders](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mental Retardation](#)
- [Mental Retardation](#)
- [Microsatellite Instability](#)
- [Narcolepsy](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neovascularization](#)

- [Neuroma](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precursor T-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Proteus Syndrome](#)
- [Psychotic Disorders](#)
- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Schizophrenia](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Syndrome](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)