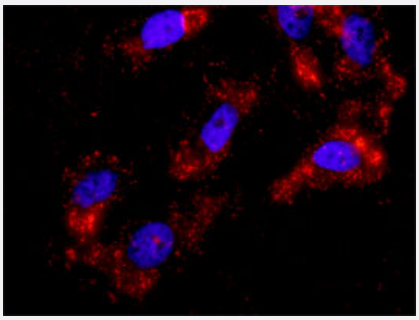
PDGFRA & STAT3 Protein Protein Interaction Antibody Pair

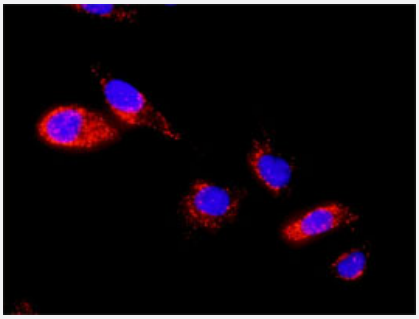
Catalog # DI0431 Size 1 Set

Applications



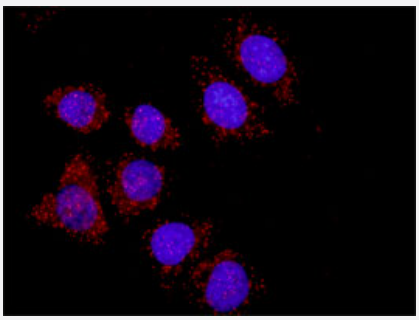
In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between PDGFRA and STAT3. PC-3 cells were stained with anti-PDGFRA rabbit purified polyclonal antibody 1:100 and anti-STAT3 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



In situ Proximity Ligation Assay (Cell)

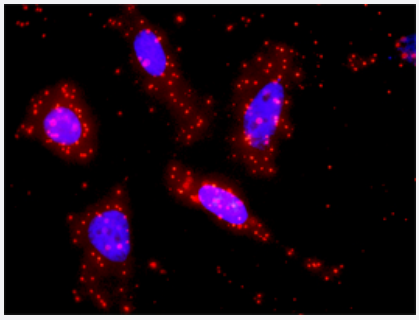
Representative image of Proximity Ligation Assay of protein-protein interactions between PDGFRA and STAT3. A-549 cells were stained with anti-PDGFRA rabbit purified polyclonal antibody 1:100 and anti-STAT3 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between PDGFRA and STAT3. HT-29 cells were stained with anti-PDGFRA rabbit purified polyclonal antibody 1:100 and anti-STAT3 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

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Representative image of Proximity Ligation Assay of protein-protein interactions between PDGFRA and STAT3. HeLa cells were stained with anti-PDGFRA rabbit purified polyclonal antibody 1:1200 and anti-STAT3 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 PDGFRA protein, and the other against the STAT3 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 PDGFRA and STAT3. HeLa cells were stained with anti-PDGFRA rabbit purified polyclonal antibody 1:1200 and anti-STAT3 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 Products	Antibody pair set content: 1. PDGFRA rabbit purified polyclonal antibody (100 ug) 2. STAT3 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)

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- *In situ* Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between PDGFRA and STAT3. HT-29 cells were stained with anti-PDGFRA rabbit purified polyclonal antibody 1:100 and anti-STAT3 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Gene Info — PDGFRA

Entrez GeneID	5156
Gene Name	PDGFRA
Gene Alias	CD140A, MGC74795, PDGFR2, Rhe-PDGFRA
Gene Description	platelet-derived growth factor receptor, alpha polypeptide
Omim ID	173490 606764 607685
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a cell surface tyrosine kinase receptor for members of the platelet-derived gro wth 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. Studies in knockout mice, where homozygosity is lethal, indicate that the alpha form of the platelet-derived growth factor receptor is particularly important for kidney development since mice heterozygous for the receptor exhibit defective kidney phenotypes. [provided by RefSe q
Other Designations	FIP1L1/PDGFRA fusion protein|platelet-derived growth factor receptor alpha|rearranged-in-hyper eosinophilia-platelet derived growth factor receptor alpha fusion protein

Gene Info — STAT3

Entrez GeneID	6774
Gene Name	STAT3
Gene Alias	APRF, FLJ20882, HIES, MGC16063
Gene Description	signal transducer and activator of transcription 3 (acute-phase response factor)
Omim ID	102582
Gene Ontology	Hyperlink

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Gene Summary	The protein encoded by this gene is a member of the STAT protein family. In response to cytokines and growth factors, STAT family members are phosphorylated by the receptor associated kinases, and then form homo- or heterodimers that translocate to the cell nucleus where they act as transcription activators. This protein is activated through phosphorylation in response to various cytokines and growth factors including IFNs, EGF, IL5, IL6, HGF, LIF and BMP2. This protein mediates the expression of a variety of genes in response to cell stimuli, and thus plays a key role in many cellular processes such as cell growth and apoptosis. The small GTPase Rac1 has been shown to bind and regulate the activity of this protein. PIAS3 protein is a specific inhibitor of this protein. Three alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq
Other Designations	DNA-binding protein APRF|acute-phase response factor|signal transducer and activator of transcription 3

Pathway

- Acute myeloid leukemia
- Adipocytokine signaling pathway
- Calcium signaling pathway
- Chemokine signaling pathway
- Colorectal cancer
- Cytokine-cytokine receptor interaction
- Endocytosis
- Focal adhesion
- Gap junction
- Glioma
- Jak-STAT signaling pathway
- MAPK signaling pathway
- Melanoma
- Pancreatic cancer
- Pathways in cancer
- Pathways in cancer
- Prostate cancer

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- Regulation of actin cytoskeleton

Disease

- Abortion
- Acute Disease
- Adenocarcinoma
- Alzheimer disease
- Aneuploidy
- Asthma
- Asthma
- Autoimmune Diseases
- Birth Weight
- Brain Neoplasms
- Breast cancer
- Breast Neoplasms
- Bronchiolitis
- Carcinoma
- Carcinoma
- Cardiovascular Diseases
- Cardiovascular Diseases
- Cleft Lip
- Cleft Lip
- Cleft Palate
- Cleft Palate
- Colitis
- Coronary Artery Disease

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- Coronary Disease
- Crohn Disease
- Depressive Disorder
- Dermatitis
- Diabetes Complications
- Diabetes Mellitus
- Diabetes Mellitus
- Disease Progression
- Disease Progression
- Disease Susceptibility
- DNA Damage
- Eczema
- Edema
- Edema
- Esophageal Neoplasms
- Fatty Liver
- Gastrointestinal Stromal Tumors
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Genomic Instability
- Glioblastoma
- Glioblastoma
- Glioma
- Hepatitis C
- Hyperparathyroidism
- Infant

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- Inflammation
- Inflammatory Bowel Diseases
- Insulin Resistance
- Kidney Neoplasms
- Leukemia
- Leukemia
- Liver Neoplasms
- Liver Neoplasms
- Lung Neoplasms
- Lymphatic Metastasis
- Lymphoma
- Malignant melanoma
- Meningeal Neoplasms
- Meningioma
- Meningomyelocele
- Metabolic Syndrome X
- Multiple Sclerosis
- Neoplasm Metastasis
- Neoplasm Recurrence
- Neoplasms
- Neural Tube Defects
- Obesity
- Osteoporosis
- Ovarian Neoplasms
- Pancreatic cancer
- Pancreatic Neoplasms

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- Pulmonary Disease
- Rectal Fistula
- Respiratory Syncytial Virus Infections
- Spinal Dysraphism
- Spondylitis
- Subdural Effusion
- Thyroid Neoplasms
- Tobacco Use Disorder
- Tobacco Use Disorder
- Tooth Abnormalities
- Tooth Abnormalities
- Uterine Cervical Neoplasms
- Vitiligo

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