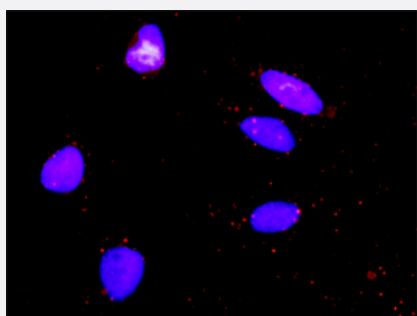


# IGF1R & STAT3 Protein Protein Interaction Antibody Pair

Catalog # DI0481

Size 1 Set

## Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between IGF1R and STAT3. HeLa cells were stained with anti-IGF1R 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 IGF1R 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 IGF1R and STAT3. HeLa cells were stained with anti-IGF1R 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 Product

Antibody pair set content:  
1. IGF1R 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)

## Gene Info — IGF1R

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                  |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrez GeneID      | <a href="#">3480</a>                                                                                                                                                                                                                                                                                                                                                                                             |
| Gene Name          | IGF1R                                                                                                                                                                                                                                                                                                                                                                                                            |
| Gene Alias         | CD221, IGFIR, JTK13, MGC142170, MGC142172, MGC18216                                                                                                                                                                                                                                                                                                                                                              |
| Gene Description   | insulin-like growth factor 1 receptor                                                                                                                                                                                                                                                                                                                                                                            |
| Omim ID            | <a href="#">147370</a>                                                                                                                                                                                                                                                                                                                                                                                           |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                        |
| Gene Summary       | This receptor binds insulin-like growth factor with a high affinity. It has tyrosine kinase activity. The insulin-like growth factor I receptor plays a critical role in transformation events. Cleavage of the precursor generates alpha and beta subunits. It is highly overexpressed in most malignant tissues where it functions as an anti-apoptotic agent by enhancing cell survival. [provided by RefSeq] |
| Other Designations | soluble IGF1R variant 1 soluble IGF1R variant 2                                                                                                                                                                                                                                                                                                                                                                  |

## Gene Info — STAT3

|                  |                                                                                  |
|------------------|----------------------------------------------------------------------------------|
| Entrez GeneID    | <a href="#">6774</a>                                                             |
| Gene Name        | STAT3                                                                            |
| Gene Alias       | APRF, FLJ20882, HIES, MGC16063                                                   |
| Gene Description | signal transducer and activator of transcription 3 (acute-phase response factor) |
| Omim ID          | <a href="#">102582</a>                                                           |
| Gene Ontology    | <a href="#">Hyperlink</a>                                                        |

## 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](#)
- [Adherens junction](#)
- [Adipocytokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Colorectal cancer](#)
- [Endocytosis](#)
- [Focal adhesion](#)
- [Glioma](#)
- [Jak-STAT signaling pathway](#)
- [Long-term depression](#)
- [Melanoma](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)

## Disease

- [Abortion](#)
- [Abortion](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Alzheimer disease](#)
- [Anemia](#)
- [Aneuploidy](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Autoimmune Diseases](#)
- [Bacteremia](#)
- [Barrett Esophagus](#)
- [Birth Weight](#)
- [Birth Weight](#)
- [Body Weight](#)
- [Bone Diseases](#)
- [Brain Ischemia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Carcinoma](#)
- [Carcinoma](#)

- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Chorioamnionitis](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Crohn Disease](#)
- [Dementia](#)
- [Depressive Disorder](#)
- [Dermatitis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Eczema](#)
- [Edema](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Esophagitis](#)

- [Fatty Liver](#)
- [Fetal Growth Retardation](#)
- [Fetal Membranes](#)
- [Gastroesophageal Reflux](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Glucose Intolerance](#)
- [Growth Disorders](#)
- [Head and Neck Neoplasms](#)
- [Hepatitis C](#)
- [Hyperplasia](#)
- [Hypertension](#)
- [Infant](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Insulin Resistance](#)
- [Intracranial Arteriosclerosis](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Leukemia](#)
- [Liver Neoplasms](#)
- [Liver Neoplasms](#)

- [Lung Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Lymphoma](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Metabolic Syndrome X](#)
- [Metaplasia](#)
- [Microsatellite Instability](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Neoplasm Metastasis](#)
- [Neoplasms](#)
- [Obesity](#)
- [Obesity](#)
- [Obstetric Labor](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Pancreatic Neoplasms](#)
- [Polycystic Ovary Syndrome](#)
- [Pre-Eclampsia](#)
- [Premature Birth](#)

- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Pulmonary Disease](#)
- [Rectal Fistula](#)
- [Recurrence](#)
- [Respiratory Syncytial Virus Infections](#)
- [Retinopathy of Prematurity](#)
- [Schizophrenia](#)
- [Skin Neoplasms](#)
- [Spinal Diseases](#)
- [Spondylitis](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Testicular Neoplasms](#)
- [Thrombophilia](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)
- [Urinary Bladder Neoplasms](#)
- [Werner syndrome](#)