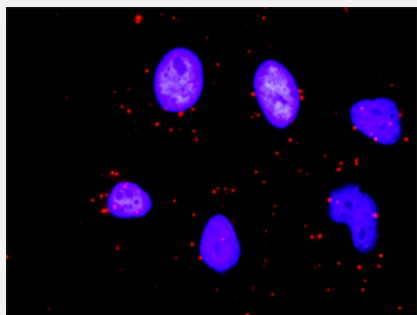


STAT5B & STAT3 Protein Protein Interaction Antibody Pair

Catalog # DI0383

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between STAT5B and STAT3. HeLa cells were stained with anti-STAT5B 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 STAT5B 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 STAT5B and STAT3. HeLa cells were stained with anti-STAT5B 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. STAT5B 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 — 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
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

Gene Info — STAT5B

Entrez GeneID	6777
Gene Name	STAT5B
Gene Alias	STAT5
Gene Description	signal transducer and activator of transcription 5B
Omim ID	245590 604260
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is a member of the STAT family of transcription factors. 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 mediates the signal transduction triggered by various cell ligands, such as IL2, IL4, CSF1, and different growth hormones. It has been shown to be involved in diverse biological processes, such as TCR signaling, apoptosis, adult mammary gland development, and sexual dimorphism of liver gene expression. This gene was found to fuse to retinoic acid receptor-alpha (RARA) gene in a small subset of acute promyelocytic leukemias (APLL). The dysregulation of the signaling pathways mediated by this protein may be the cause of the APLL. [provided by RefSeq]

Other Designations

transcription factor STAT5B

Pathway

- [Acute myeloid leukemia](#)
- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [ErbB signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)

Disease

- [Abortion](#)
- [Asthma](#)
- [Autoimmune Diseases](#)

- [Birth Weight](#)
- [Birth Weight](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Crohn Disease](#)
- [Depressive Disorder](#)
- [Dermatitis](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Eczema](#)
- [Edema](#)
- [Edema](#)

- [Fatty Liver](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Glioblastoma](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Glioma](#)
- [Hepatitis C](#)
- [Infant](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Kidney Neoplasms](#)
- [Leukemia](#)
- [Leukemia](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Meningeal Neoplasms](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Meningioma](#)
- [Multiple Sclerosis](#)
- [Neoplasm Metastasis](#)
- [Obesity](#)

- [Ovarian Neoplasms](#)
- [Pulmonary Disease](#)
- [Rectal Fistula](#)
- [Respiratory Syncytial Virus Infections](#)
- [Spondylitis](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)
- [Tooth Abnormalities](#)