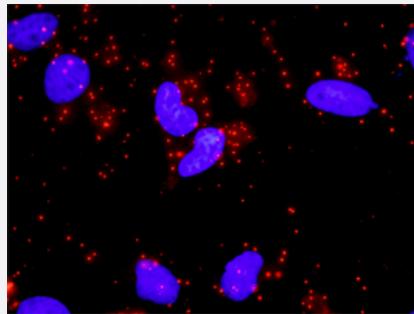


# NFKB1 & STAT3 Protein Protein Interaction Antibody Pair

Catalog # DI0372 Size 1 Set

## Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between NFKB1 and STAT3. HeLa cells were stained with anti-NFKB1 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

<b>Product Description</b>	This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the NFKB1 protein, and the other against the STAT3 protein for use in <a href="#">in situ Proximity Ligation Assay</a> . See Publication Reference below.
<b>Reactivity</b>	Human
<b>Quality Control Testing</b>	Protein protein interaction immunofluorescence result. Representative image of Proximity Ligation Assay of protein-protein interactions between NFKB1 and STAT3. HeLa cells were stained with anti-NFKB1 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.
<b>Supplied Product</b>	Antibody pair set content: 1. NFKB1 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.
<b>Storage Instruction</b>	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 — NFKB1

Entrez GeneID	<a href="#">4790</a>
Gene Name	NFKB1
Gene Alias	DKFZp686C01211, EBP-1, KBF1, MGC54151, NF-kappa-B, NFKB-p105, NFKB-p50, p105, p50
Gene Description	nuclear factor of kappa light polypeptide gene enhancer in B-cells 1
Omim ID	<a href="#">164011</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	This gene encodes a 105 kD protein which can undergo cotranslational processing by the 26S proteasome to produce a 50 kD protein. The 105 kD protein is a Rel protein-specific transcription inhibitor and the 50 kD protein is a DNA binding subunit of the NF-kappa-B (NFKB) protein complex. NFKB is a transcription regulator that is activated by various intra- and extra-cellular stimuli such as cytokines, oxidant-free radicals, ultraviolet irradiation, and bacterial or viral products. Activated NFKB translocates into the nucleus and stimulates the expression of genes involved in a wide variety of biological functions. Inappropriate activation of NFKB has been associated with a number of inflammatory diseases while persistent inhibition of NFKB leads to inappropriate immune cell development or delayed cell growth. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]
Other Designations	DNA binding factor KBF1 NF-kappabeta nuclear factor NF-kappa-B p50 subunit nuclear factor kappa-B DNA binding subunit nuclear factor kappa-B, subunit 1

## 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](#)
- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Adipocytokine signaling pathway](#)
- [Apoptosis](#)
- [B cell receptor signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Jak-STAT signaling pathway](#)
- [MAPK signaling pathway](#)
- [Metabolic pathways](#)
- [Neurotrophin signaling pathway](#)
- [Pancreatic cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)

- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [Toll-like receptor signaling pathway](#)

## Disease

- [Abortion](#)
- [Abortion](#)
- [Acute Lung Injury](#)
- [Adenocarcinoma](#)
- [Alcoholism](#)
- [Alzheimer disease](#)
- [Arthritis](#)
- [Asthma](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Autoimmune Diseases](#)
- [Behcet Syndrome](#)
- [Birth Weight](#)
- [Birth Weight](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)

- [Calcinosis](#)
- [Carcinoid Tumor](#)
- [Carcinoma](#)
- [Carcinoma](#)
- [Cardiomyopathy](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Celiac Disease](#)
- [Chorioamnionitis](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colitis](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Connective Tissue Diseases](#)
- [Coronary Artery Disease](#)
- [Crohn Disease](#)
- [Crohn Disease](#)
- [Depressive Disorder](#)
- [Dermatitis](#)
- [Dermatitis](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)

- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
  
- [Diabetic Retinopathy](#)
  
- [Disease Progression](#)
  
- [Disease Progression](#)
  
- [Disease Susceptibility](#)
  
- [Disease Susceptibility](#)
  
- [DNA Damage](#)
  
- [Eczema](#)
  
- [Edema](#)
  
- [Edema](#)
  
- [Endometriosis](#)
  
- [Esophageal Neoplasms](#)
  
- [Fatty Liver](#)
  
- [Fetal Diseases](#)
  
- [Fetal Membranes](#)
  
- [Gastrointestinal Neoplasms](#)
  
- [Genetic Predisposition to Disease](#)
  
- [Genetic Predisposition to Disease](#)
  
- [Genomic Instability](#)
  
- [Glioblastoma](#)
  
- [Glioblastoma](#)
  
- [Glioma](#)
  
- [Glioma](#)
  
- [Graves Disease](#)
  
- [Graves Ophthalmopathy](#)
  
- [Head and Neck Neoplasms](#)

- [Hematologic Diseases](#)
- [Hepatitis B](#)
- [Hepatitis C](#)
- [Hepatitis C](#)
- [Hodgkin Disease](#)
- [Immune System Diseases](#)
- [Infant](#)
- [Infection](#)
- [Inflammation](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Kidney Neoplasms](#)
- [Leukemia](#)
- [Leukemia](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lung Neoplasms](#)
- [Lupus Erythematosus](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)

- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Malignant melanoma](#)
- [Melanoma](#)
- [Meningeal Neoplasms](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Meningioma](#)
- [Metabolic Syndrome X](#)
- [Mouth Neoplasms](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Musculoskeletal Diseases](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuroendocrine Tumors](#)
- [Obesity](#)
- [Obesity](#)
- [Obstetric Labor](#)
- [Occupational Diseases](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Pain](#)

- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Parkinson disease](#)
- [Polycystic Ovary Syndrome](#)
- [Polymyalgia Rheumatica](#)
- [Postoperative Hemorrhage](#)
- [Pre-Eclampsia](#)
- [Pregnancy Complications](#)
- [Premature Birth](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Prostatitis](#)
- [Psoriasis](#)
- [Puberty](#)
- [Pulmonary Disease](#)
- [Pulmonary Disease](#)
- [Rectal Fistula](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Respiratory Syncytial Virus Infections](#)
- [Sarcoidosis](#)
- [Silicosis](#)
- [Skin Diseases](#)
- [Skin Neoplasms](#)
- [Spondylitis](#)

- [Spondylitis](#)
- [Stomach Neoplasms](#)
- [Temporal Arteritis](#)
- [Thrombophilia](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Viremia](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)