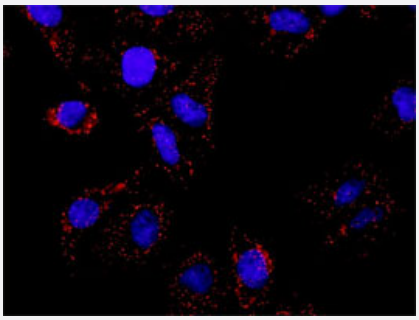
STAT1 & PIAS1 Protein Protein Interaction Antibody Pair

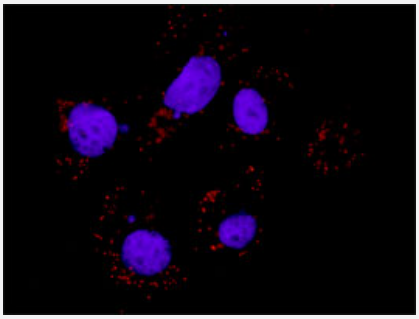
Catalog # DI0438 Size 1 Set

Applications



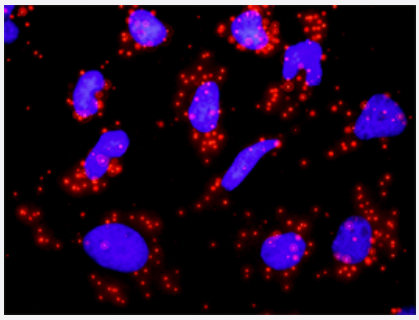
In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between STAT1 and PIAS1. A-549 cells were stained with anti-STAT1 rabbit purified polyclonal antibody 1:100 and anti-PIAS1 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 STAT1 and PIAS1. PC-3 cells were stained with anti-STAT1 rabbit purified polyclonal antibody 1:100 and anti-PIAS1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Representative image of Proximity Ligation Assay of protein-protein interactions between STAT1 and PIAS1. HeLa cells were stained with anti-STAT1 rabbit purified polyclonal antibody 1:1200 and anti-PIAS1 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 STAT1 protein, and the other against the PIAS1 protein for use in *in situ* Proximity Ligation Assay. See Publication Reference below.

Copyright © 2023 Abnova Corporation. All Rights Reserved.

Reactivity	Human
Quality Control Testing	Protein protein interaction immunofluorescence result. Representative image of Proximity Ligation Assay of protein-protein interactions between STAT1 an d PIAS1. HeLa cells were stained with anti-STAT1 rabbit purified polyclonal antibody 1:1200 and ant i-PIAS1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein in teraction complex. The images were analyzed using an optimized freeware (BlobFinder) download fr om The Centre for Image Analysis at Uppsala University.
Supplied Products	Antibody pair set content: 1. STAT1 rabbit purified polyclonal antibody (100 ug) 2. PIAS1 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 tha w cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

- *In situ* Proximity Ligation Assay (Cell)

  Representative image of Proximity Ligation Assay of protein-protein interactions between STAT1 and PIAS1. A-549 cells were stained with anti-STAT1 rabbit purified polyclonal antibody 1:100 and anti-PIAS1 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 STAT1 and PIAS1. PC-3 cells were stained with anti-STAT1 rabbit purified polyclonal antibody 1:100 and anti-PIAS1 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 — STAT1

Entrez GeneID	6772
Gene Name	STAT1
Gene Alias	DKFZp686B04100, ISGF-3, STAT91
Gene Description	signal transducer and activator of transcription 1, 91kDa
Omim ID	209950 600555
Gene Ontology	Hyperlink

Copyright © 2023 Abnova Corporation. All Rights Reserved.

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 can be activated by various ligands including interferon-alpha, interferon-gamma, EGF, PDGF and IL6. This protein mediates the expression of a variety of genes, which is thought to be important for cell viability in response to different cell stimuli and pathogens. Two alternatively spliced transcript variants encoding distinct isoforms have been described. [provided by RefSeq
Other Designations	OTTHUMP00000165047|signal transducer and activator of transcription 1|signal transducer and activator of transcription-1|transcription factor ISGF-3 components p91/p84

Gene Info — PIAS1

Entrez GeneID	8554
Gene Name	PIAS1
Gene Alias	DDXBP1, GBP, GU/RH-II, MGC141878, MGC141879, ZMIZ3
Gene Description	protein inhibitor of activated STAT, 1
Omim ID	603566
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the mammalian PIAS [protein inhibitor of activated STAT-1 (signal transducer and activator of transcription-1)] family. This member contains a putative zinc-binding motif and a highly acidic region. It inhibits STAT1-mediated gene activation and the DNA binding activity, binds to Gu protein/RNA helicase II/DEAD box polypeptide 21, and interacts with androgen receptor (AR). It functions in testis as a nuclear receptor transcriptional coregulator and may have a role in AR initiation and maintenance of spermatogenesis. [provided by RefSeq
Other Designations	AR interacting protein|DEAD/H (Asp-Glu-Ala-Asp/His) box binding protein 1|protein inhibitor of activated STAT-1|zinc finger, MIZ-type containing 3

Pathway

- Chemokine signaling pathway
- Jak-STAT signaling pathway
- Jak-STAT signaling pathway
- Pancreatic cancer
- Pathways in cancer

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- Pathways in cancer
- Small cell lung cancer
- Toll-like receptor signaling pathway
- Ubiquitin mediated proteolysis

Disease

- Arthritis
- Asthma
- Birth Weight
- Breast cancer
- Breast Neoplasms
- Bronchiolitis
- Campylobacter Infections
- Carcinoma
- Cardiovascular Diseases
- Chronic Disease
- Diabetes Mellitus
- Disease Progression
- Disease Susceptibility
- Edema
- Genetic Predisposition to Disease
- Glioblastoma
- Glioma
- Glomerulonephritis
- Hepatitis B
- Hepatitis C

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- Hypersensitivity
- Infant
- Leukemia
- Liver Cirrhosis
- Liver Neoplasms
- Lung Neoplasms
- Lupus Erythematosus
- Lymphoma
- Meningeal Neoplasms
- Meningioma
- Multiple Sclerosis
- Multiple Sclerosis
- Neutropenia
- Osteoporosis
- Ovarian Neoplasms
- Papillomavirus Infections
- Proteinuria
- Pulmonary Disease
- Respiratory Syncytial Virus Infections
- Salmonella Infections
- Thrombocytopenia
- Thyroid Neoplasms
- Tobacco Use Disorder
- Tuberculosis
- Urinary Bladder Neoplasms
- Uterine Cervical Neoplasms

Copyright © 2023 Abnova Corporation. All Rights Reserved.

- Viremia
- Werner syndrome

Copyright © 2023 Abnova Corporation. All Rights Reserved.