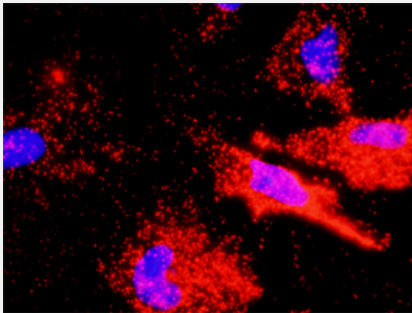


RET & STAT3 Protein Protein Interaction Antibody Pair

Catalog # DI0436

Size 1 Set

Applications



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

Entrez GeneID [5979](#)

Gene Name RET

Gene Alias CDHF12, HSCR1, MEN2A, MEN2B, MTC1, PTC, RET-ELE1, RET51

Gene Description ret proto-oncogene

Omim ID [142623](#) [155240](#) [162300](#) [164761](#) [171300](#) [171400](#) [209880](#)

Gene Ontology [Hyperlink](#)

Gene Summary This gene, a member of the cadherin superfamily, encodes one of the receptor tyrosine kinases, which are cell-surface molecules that transduce signals for cell growth and differentiation. This gene plays a crucial role in neural crest development, and it can undergo oncogenic activation in vivo and in vitro by cytogenetic rearrangement. Mutations in this gene are associated with the disorders multiple endocrine neoplasia, type IIA, multiple endocrine neoplasia, type IIB, Hirschsprung disease, and medullary thyroid carcinoma. Two transcript variants encoding different isoforms have been found for this gene. Additional transcript variants have been described but their biological validity has not been confirmed. [provided by RefSeq]

Other Designations RET transforming sequence|cadherin family member 12|hydroxyaryl-protein kinase|oncogene RET|receptor tyrosine kinase|ret proto-oncogene (multiple endocrine neoplasia and medullary thyroid carcinoma 1, Hirschsprung disease)

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

Pathway

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

Disease

- [Abortion](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adrenal Gland Neoplasms](#)
- [Alzheimer Disease](#)
- [Asthma](#)

- [Atherosclerosis](#)
- [Autoimmune Diseases](#)
- [Birth Weight](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Carcinoma](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Crohn Disease](#)
- [Depressive Disorder](#)
- [Dermatitis](#)
- [Diabetes Mellitus](#)
- [Digestive System Abnormalities](#)
- [Disease Progression](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [DNA Damage](#)
- [Down Syndrome](#)
- [Eczema](#)

- [Edema](#)
- [Endocrine Gland Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Fatty Liver](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genomic Instability](#)
- [Glioblastoma](#)
- [Glioma](#)
- [Glomus Tumor](#)
- [Hashimoto Disease](#)
- [Head and Neck Neoplasms](#)
- [Hepatitis C](#)
- [Hippel-Lindau Disease](#)
- [Hirschsprung Disease](#)
- [Hydronephrosis](#)
- [Hyperplasia](#)
- [Hypertension](#)
- [Infant](#)
- [Inflammation](#)
- [Inflammatory Bowel Diseases](#)
- [Insulin Resistance](#)
- [Intestinal Diseases](#)
- [Kidney Diseases](#)
- [Kidney Neoplasms](#)
- [Leukemia](#)

- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Macular Degeneration](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 2a](#)
- [Multiple Endocrine Neoplasia Type 2b](#)
- [Multiple Sclerosis](#)
- [Necrosis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neurofibromatosis](#)
- [Nondisjunction](#)
- [Obesity](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Paraganglioma](#)
- [Parkinson disease](#)
- [Pheochromocytoma](#)

- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Pulmonary Disease](#)
- [Rectal Fistula](#)
- [Recurrence](#)
- [Respiratory Syncytial Virus Infections](#)
- [Schizophrenia](#)
- [Sleep Apnea](#)
- [Spondylitis](#)
- [Sudden Infant Death](#)
- [Syndrome](#)
- [Taste](#)
- [Thyroid Diseases](#)
- [Thyroid Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)
- [Urea Cycle Disorders](#)
- [Urinary Bladder Neoplasms](#)
- [Urogenital Abnormalities](#)
- [Vesico-Ureteral Reflux](#)
- [Vitamin A Deficiency](#)
- [von Hippel-Lindau Disease](#)
- [Von Hippel-Lindau syndrome](#)

- [Werner syndrome](#)