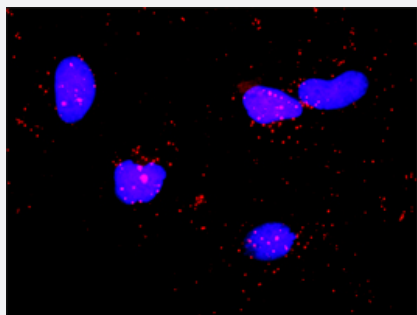


RET & PLCG1 Protein Protein Interaction Antibody Pair

Catalog # DI0376

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between RET and PLCG1. HeLa cells were stained with anti-RET rabbit purified polyclonal antibody 1:1200 and anti-PLCG1 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 PLCG1 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 PLCG1. HeLa cells were stained with anti-RET rabbit purified polyclonal antibody 1:1200 and anti-PLCG1 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. PLCG1 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 — PLCG1

Entrez GeneID [5335](#)

Gene Name PLCG1

Gene Alias PLC-II, PLC1, PLC148, PLCgamma1

Gene Description phospholipase C, gamma 1

Omim ID [172420](#)

Gene Ontology [Hyperlink](#)

Gene Summary The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diacylglycerol from phosphatidylinositol 4,5-bisphosphate. This reaction uses calcium as a cofactor and plays an important role in the intracellular transduction of receptor-mediated tyrosine kinase activators. For example, when activated by SRC, the encoded protein causes the Ras guanine nucleotide exchange factor RasGRP1 to translocate to the Golgi, where it activates Ras. Also, this protein has been shown to be a major substrate for heparin-binding growth factor 1 (acidic fibroblast growth factor)-activated tyrosine kinase. Two transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Other Designations 1-phosphatidyl-D-myo-inositol-4,5-bisphosphate|1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase gamma 1|OTTHUMP00000031787|OTTHUMP00000178982|PLC-gamma-1|inositol trisphosphohydrolase|monophosphatidylinositol phosphodiesterase|phosphatidylinositol

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)

Pathway

- [Calcium signaling pathway](#)
- [Endocytosis](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Glioma](#)
- [Inositol phosphate metabolism](#)
- [Leukocyte transendothelial migration](#)
- [Metabolic pathways](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Phosphatidylinositol signaling system](#)
- [T cell receptor signaling pathway](#)

- [Thyroid cancer](#)
- [VEGF signaling pathway](#)
- [Vibrio cholerae infection](#)

Disease

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adrenal Gland Neoplasms](#)
- [Alzheimer Disease](#)
- [Atherosclerosis](#)
- [Bipolar Disorder](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Diabetes Mellitus](#)
- [Digestive System Abnormalities](#)
- [Disease Progression](#)
- [Down Syndrome](#)
- [Edema](#)
- [Endocrine Gland Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glomus Tumor](#)
- [Hashimoto Disease](#)

- [Head and Neck Neoplasms](#)
- [Hippel-Lindau Disease](#)
- [Hirschsprung Disease](#)
- [HIV Infections](#)
- [Hydronephrosis](#)
- [Hyperplasia](#)
- [Hypertension](#)
- [Intestinal Diseases](#)
- [Kidney Diseases](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Macular Degeneration](#)
- [Mental Disorders](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 2a](#)
- [Multiple Endocrine Neoplasia Type 2b](#)
- [Multiple Sclerosis](#)
- [Necrosis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neurofibromatosis](#)
- [Nondisjunction](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)

- [Paraganglioma](#)
- [Parkinson disease](#)
- [Pheochromocytoma](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Schizophrenia](#)
- [Sleep Apnea](#)
- [Sudden Infant Death](#)
- [Syndrome](#)
- [Taste](#)
- [Thyroid Diseases](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Urea Cycle Disorders](#)
- [Urinary Bladder Neoplasms](#)
- [Urogenital Abnormalities](#)
- [Vesico-Ureteral Reflux](#)
- [Vitamin A Deficiency](#)
- [von Hippel-Lindau Disease](#)
- [Von Hippel-Lindau syndrome](#)
- [Werner syndrome](#)