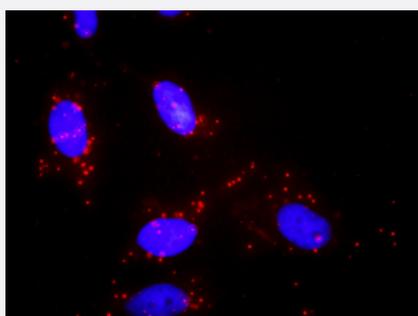


# PTK2 & RET Protein Protein Interaction Antibody Pair

Catalog # DI0468      Size 1 Set

## Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between PTK2 and RET. HeLa cells were stained with anti-PTK2 rabbit purified polyclonal antibody 1:1200 and anti-RET 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 PTK2 protein, and the other against the RET 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 PTK2 and RET. HeLa cells were stained with anti-PTK2 rabbit purified polyclonal antibody 1:1200 and anti-RET 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. PTK2 rabbit purified polyclonal antibody (100 ug)  
 2. RET 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 — PTK2

Entrez GeneID	<a href="#">5747</a>
Gene Name	PTK2
Gene Alias	FADK, FAK, FAK1, pp125FAK
Gene Description	PTK2 protein tyrosine kinase 2
Omim ID	<a href="#">600758</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	<p>This gene encodes a cytoplasmic protein tyrosine kinase which is found concentrated in the focal adhesions that form between cells growing in the presence of extracellular matrix constituents. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence similarity to kinases from other subfamilies. Activation of this gene may be an important early step in cell growth and intracellular signal transduction pathways triggered in response to certain neural peptides or to cell interactions with the extracellular matrix. At least four transcript variants encoding four different isoforms have been found for this gene, but the full-length natures of only two of them have been determined. [provided by RefSeq]</p>
Other Designations	focal adhesion kinase 1

## Gene Info — RET

Entrez GeneID	<a href="#">5979</a>
Gene Name	RET
Gene Alias	CDHF12, HSCR1, MEN2A, MEN2B, MTC1, PTC, RET-ELE1, RET51
Gene Description	ret proto-oncogene
Omim ID	<a href="#">142623</a> <a href="#">155240</a> <a href="#">162300</a> <a href="#">164761</a> <a href="#">171300</a> <a href="#">171400</a> <a href="#">209880</a>
Gene Ontology	<a href="#">Hyperlink</a>

**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**

- [Axon guidance](#)
- [Chemokine signaling pathway](#)
- [Endocytosis](#)
- [ErbB signaling pathway](#)
- [Focal adhesion](#)
- [Leukocyte transendothelial migration](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Small cell lung cancer](#)
- [Thyroid cancer](#)
- [VEGF signaling pathway](#)

**Disease**

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adrenal Gland Neoplasms](#)

- [Alzheimer Disease](#)
- [Atherosclerosis](#)
- [Autistic Disorder](#)
- [Carcinoma](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Digestive System Abnormalities](#)
- [Disease Progression](#)
- [Down Syndrome](#)
- [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](#)
- [Leukemia](#)
- [Lung Neoplasms](#)

- [Lymphatic Metastasis](#)
- [Macular Degeneration](#)
- [Mental Retardation](#)
- [Multiple endocrine neoplasia](#)
- [Multiple Endocrine Neoplasia Type 2a](#)
- [Multiple Endocrine Neoplasia Type 2b](#)
- [Necrosis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neovascularization](#)
- [Neurofibromatosis](#)
- [Nondisjunction](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Paranglioma](#)
- [Parkinson disease](#)
- [Pheochromocytoma](#)
- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Psychotic Disorders](#)
- [Pulmonary Disease](#)
- [Recurrence](#)
- [Schizophrenia](#)
- [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](#)