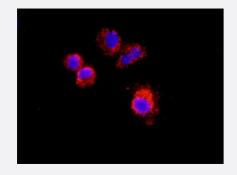


KIT & PLCG1 Protein Protein Interaction Antibody Pair

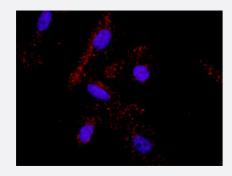
Catalog # DI0423 Size 1 Set

Applications



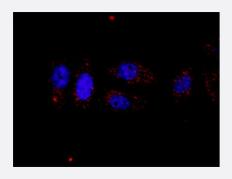
In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between KIT and PLCG1. A-549 cells were stained with anti-KIT rabbit purified polyclonal antibody 1:100 and anti-PLCG1 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)

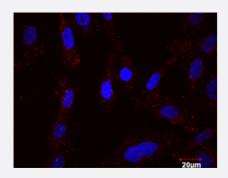
Representative image of Proximity Ligation Assay of protein-protein interactions between KIT and PLCG1. PC-3 cells were stained with anti-KIT rabbit purified polyclonal antibody 1:100 and anti-PLCG1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



In situ Proximity Ligation Assay (Cell)

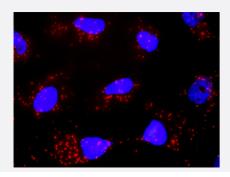
Representative image of Proximity Ligation Assay of protein-protein interactions between KIT and PLCG1. HT-29 cells were stained with anti-KIT rabbit purified polyclonal antibody 1:100 and anti-PLCG1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).





In situ Proximity Ligation Assay (Cell)

Confocal microscopy image of Proximity Ligation Assay of protein-protein interactions between KIT and PLCG1. PC-3 cells were stained with anti-KIT rabbit purified polyclonal antibody 1:100 and anti-PLCG1 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 KIT and PLCG1. HeLa cells were stained with anti-KIT 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-prot ein interaction, one against the KIT protein, and the other against the PLCG1 protein for use in <u>in situ</u> 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 KIT and P LCG1. HeLa cells were stained with anti-KIT rabbit purified polyclonal antibody 1:1200 and anti-PLC G1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein intera ction 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. KIT 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 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 KIT and PLCG1. A-549 cells were stained with anti-KIT rabbit purified polyclonal antibody 1:100 and anti-PLCG1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

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In situ Proximity Ligation Assay (Cell)

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In situ Proximity Ligation Assay (Cell)

Confocal microscopy image of Proximity Ligation Assay of protein-protein interactions between KIT and PLCG1. PC-3 cells were stained with anti-KIT rabbit purified polyclonal antibody 1:100 and anti-PLCG1 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 — KIT	
Entrez GenelD	<u>3815</u>
Gene Name	КІТ
Gene Alias	C-Kit, CD117, PBT, SCFR
Gene Description	v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog
Omim ID	<u>164920 172800 273300 601626 606764</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene encodes the human homolog of the proto-oncogene c-kit. C-kit was first identified as the cellular homolog of the feline sarcoma viral oncogene v-kit. This protein is a type 3 transmembra ne receptor for MGF (mast cell growth factor, also known as stem cell factor). Mutations in this gene are associated with gastrointestinal stromal tumors, mast cell disease, acute myelogenous lukemia, and piebaldism. Multiple transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq
Other Designations	mast/stem cell growth factor receptor proto-oncogene tyrosine-protein kinase Kit soluble KIT varia nt 1



Gene Info — PLCG1	
Entrez GenelD	<u>5335</u>
Gene Name	PLCG1
Gene Alias	PLC-II, PLC1, PLC148, PLCgamma1
Gene Description	phospholipase C, gamma 1
Omim ID	172420
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The protein encoded by this gene catalyzes the formation of inositol 1,4,5-trisphosphate and diac ylglycerol 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 nucle otide 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 phosph odiesterase gamma 1 OTTHUMP0000031787 OTTHUMP00000178982 PLC-gamma-1 inositol trisphosphohydrolase monophosphatidylinositol phosphodiesterase phosphatidylinositol

Pathway

- Acute myeloid leukemia
- Calcium signaling pathway
- Cytokine-cytokine receptor interaction
- Endocytosis
- Epithelial cell signaling in Helicobacter pylori infection
- ErbB signaling pathway
- Fc epsilon RI signaling pathway
- Fc gamma R-mediated phagocytosis
- Glioma



- Hematopoietic cell lineage
- Inositol phosphate metabolism
- Leukocyte transendothelial migration
- Melanogenesis
- 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
- VEGF signaling pathway
- Vibrio cholerae infection

Disease

- Acute Disease
- Aneuploidy
- Azoospermia
- Bipolar Disorder
- Cardiovascular Diseases
- Chronic Disease
- Constipation
- Diabetes Mellitus
- Disease Progression
- Edema



- Gastrointestinal Stromal Tumors
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Hematologic Neoplasms
- HIV Infections
- Hyperpigmentation
- Infertility
- Kidney Failure
- Leukemia
- Liver Neoplasms
- Lung Neoplasms
- Malignant melanoma
- Mastocytosis
- Melanoma
- Mental Disorders
- Multiple Sclerosis
- Neoplasm
- Neoplasm Recurrence
- Neoplasm Seeding
- Oligospermia
- Osteoporosis
- Pancreatic cancer
- Pancreatic Neoplasms
- Skin Neoplasms
- Splenic Neoplasms
- Stomach Neoplasms



- Thyroid Neoplasms
- <u>Translocation</u>