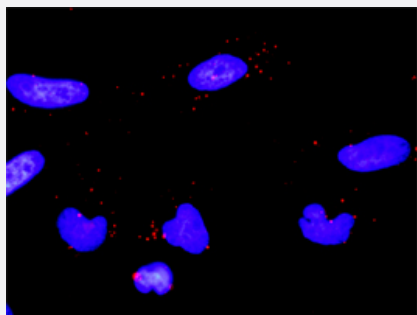


PLCG2 & ERBB2 Protein Protein Interaction Antibody Pair

Catalog # DI0575

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between PLCG2 and ERBB2. HeLa cells were stained with anti-PLCG2 rabbit purified polyclonal antibody 1:1200 and anti-ERBB2 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 PLCG2 protein, and the other against the ERBB2 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 PLCG2 and ERBB2. HeLa cells were stained with anti-PLCG2 rabbit purified polyclonal antibody 1:1200 and anti-ERBB2 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. PLCG2 rabbit purified polyclonal antibody (100 ug)
2. ERBB2 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 — ERBB2

Entrez GeneID	2064
Gene Name	ERBB2
Gene Alias	CD340, HER-2, HER-2/neu, HER2, NEU, NGL, TKR1
Gene Description	v-erb-b2 erythroblastic leukemia viral oncogene homolog 2, neuro/glioblastoma derived oncogene homolog (avian)
Omim ID	137215 137800 164870 211980
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a member of the epidermal growth factor (EGF) receptor family of receptor tyrosine kinases. This protein has no ligand binding domain of its own and therefore cannot bind growth factors. However, it does bind tightly to other ligand-bound EGF receptor family members to form a heterodimer, stabilizing ligand binding and enhancing kinase-mediated activation of downstream signalling pathways, such as those involving mitogen-activated protein kinase and phosphatidylinositol-3 kinase. Allelic variations at amino acid positions 654 and 655 of isoform a (positions 624 and 625 of isoform b) have been reported, with the most common allele, Ile654/Ile655, shown here. Amplification and/or overexpression of this gene has been reported in numerous cancers, including breast and ovarian tumors. Alternative splicing results in several additional transcript variants, some encoding different isoforms and others that have not been fully characterized. [provided by RefSeq]
Other Designations	c-erb B2/neu protein erbB-2 herstatin neuroblastoma/glioblastoma derived oncogene homolog v-erb-b2 avian erythroblastic leukemia viral oncogene homolog 2 (neuro/glioblastoma derived oncogene homolog)

Gene Info — PLCG2

Entrez GeneID	5336
Gene Name	PLCG2
Gene Alias	-
Gene Description	phospholipase C, gamma 2 (phosphatidylinositol-specific)
Omim ID	600220

Gene Ontology

[Hyperlink](#)

Gene Summary

Enzymes of the phospholipase C family catalyze the hydrolysis of phospholipids to yield diacylglycerols and water-soluble phosphorylated derivatives of the lipid head groups. A number of these enzymes have specificity for phosphoinositides. Of the phosphoinositide-specific phospholipase C enzymes, C-beta is regulated by heterotrimeric G protein-coupled receptors, while the closely related C-gamma-1 (PLCG1; MIM 172420) and C-gamma-2 enzymes are controlled by receptor tyrosine kinases. The C-gamma-1 and C-gamma-2 enzymes are composed of phospholipase domains that flank regions of homology to noncatalytic domains of the SRC oncogene product, SH2 and SH3.[supplied by OMIM]

Other Designations

phospholipase C gamma 2|phospholipase C, gamma 2|phospholipase C, gamma 2 (phosphatidylinositol-specific)

Pathway

- [Adherens junction](#)
- [B cell receptor signaling pathway](#)
- [Bladder cancer](#)
- [Calcium signaling pathway](#)
- [Calcium signaling pathway](#)
- [Endometrial cancer](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Glioma](#)
- [Inositol phosphate metabolism](#)
- [Leukocyte transendothelial migration](#)
- [Metabolic pathways](#)
- [Natural killer cell mediated cytotoxicity](#)

- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Phosphatidylinositol signaling system](#)
- [Prostate cancer](#)
- [VEGF signaling pathway](#)
- [Vibrio cholerae infection](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Bipolar Disorder](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cell Transformation](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colorectal Neoplasms](#)
- [Disease Progression](#)

- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Fibroadenoma](#)
- [Gastritis](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Heart Diseases](#)
- [HIV Infections](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Mental Disorders](#)
- [Mouth Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)

- [Pancreatic Neoplasms](#)
- [Papillomavirus Infections](#)
- [Pharyngeal Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Werner syndrome](#)