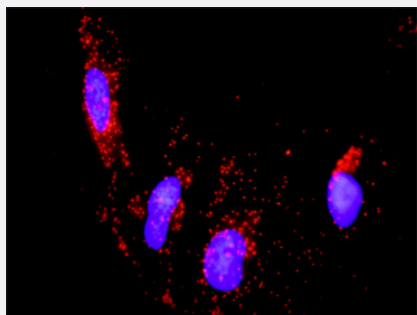


PTK2B & ERBB2 Protein Protein Interaction Antibody Pair

Catalog # DI0164

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between PTK2B and ERBB2. HeLa cells were stained with anti-PTK2B 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 PTK2B 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 PTK2B and ERBB2. HeLa cells were stained with anti-PTK2B 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. PTK2B 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 — PTK2B

Entrez GeneID	2185
Gene Name	PTK2B
Gene Alias	CADTK, CAKB, FADK2, FAK2, FRNK, PKB, PTK, PYK2, RAFTK
Gene Description	PTK2B protein tyrosine kinase 2 beta
Omim ID	601212

Gene Ontology

[Hyperlink](#)

Gene Summary

This gene encodes a cytoplasmic protein tyrosine kinase which is involved in calcium-induced regulation of ion channels and activation of the map kinase signaling pathway. The encoded protein may represent an important signaling intermediate between neuropeptide-activated receptors or neurotransmitters that increase calcium flux and the downstream signals that regulate neuronal activity. The encoded protein undergoes rapid tyrosine phosphorylation and activation in response to increases in the intracellular calcium concentration, nicotinic acetylcholine receptor activation, membrane depolarization, or protein kinase C activation. This protein has been shown to bind CRK-associated substrate, nephrocystin, GTPase regulator associated with FAK, and the SH2 domain of GRB2. The encoded protein is a member of the FAK subfamily of protein tyrosine kinases but lacks significant sequence similarity to kinases from other subfamilies. Four transcript variants encoding two different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

CAK beta|OTTHUMP00000128275|OTTHUMP00000162913|calcium-dependent tyrosine kinase|cell adhesion kinase beta|focal adhesion kinase 2|proline-rich tyrosine kinase 2|protein kinase B|protein tyrosine kinase 2 beta|related adhesion focal tyrosine kinase

Pathway

- [Adherens junction](#)
- [Bladder cancer](#)
- [Calcium signaling pathway](#)
- [Calcium signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Focal adhesion](#)
- [GnRH signaling pathway](#)
- [Leukocyte transendothelial migration](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)

Disease

- [Adenocarcinoma](#)
- [Ataxia telangiectasia](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cell Transformation](#)
- [Cell Transformation](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colorectal Neoplasms](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Fibroadenoma](#)
- [Gastritis](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Head and Neck Neoplasms](#)
- [Heart Diseases](#)

- [HIV Infections](#)
- [Hypertension](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Kidney Failure](#)
- [Laryngeal Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Melanoma](#)
- [Mouth Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Papillomavirus Infections](#)
- [Pharyngeal Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Skin Neoplasms](#)

- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)
- [Werner syndrome](#)