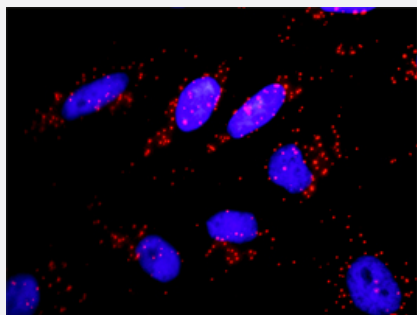


# APPL1 & PIK3CA Protein Protein Interaction Antibody Pair

Catalog # DI0292

Size 1 Set

## Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between APPL1 and PIK3CA. HeLa cells were stained with anti-APPL1 rabbit purified polyclonal antibody 1:1200 and anti-PIK3CA 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 APPL1 protein, and the other against the PIK3CA 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 APPL1 and PIK3CA. HeLa cells were stained with anti-APPL1 rabbit purified polyclonal antibody 1:1200 and anti-PIK3CA 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. APPL1 rabbit purified polyclonal antibody (100 ug)  
2. PIK3CA 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 — PIK3CA

|                    |                                                                                                                                                                                                                                                                                                                                                              |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrez GeneID      | <a href="#">5290</a>                                                                                                                                                                                                                                                                                                                                         |
| Gene Name          | PIK3CA                                                                                                                                                                                                                                                                                                                                                       |
| Gene Alias         | MGC142161, MGC142163, PI3K, p110-alpha                                                                                                                                                                                                                                                                                                                       |
| Gene Description   | phosphoinositide-3-kinase, catalytic, alpha polypeptide                                                                                                                                                                                                                                                                                                      |
| Omim ID            | <a href="#">114480</a> <a href="#">114500</a> <a href="#">171834</a> <a href="#">604370</a>                                                                                                                                                                                                                                                                  |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                    |
| Gene Summary       | Phosphatidylinositol 3-kinase is composed of an 85 kDa regulatory subunit and a 110 kDa catalytic subunit. The protein encoded by this gene represents the catalytic subunit, which uses ATP to phosphorylate PtdIns, PtdIns4P and PtdIns(4,5)P2. This gene has been found to be oncogenic and has been implicated in cervical cancers. [provided by RefSeq] |
| Other Designations | PI3-kinase p110 subunit alpha PtdIns-3-kinase p110 phosphatidylinositol 3-kinase, catalytic, 110-KD, alpha phosphatidylinositol 3-kinase, catalytic, alpha polypeptide phosphatidylinositol-4,5-bisphosphate 3-kinase catalytic subunit, alpha isoform                                                                                                       |

## Gene Info — APPL1

|                  |                                                                                         |
|------------------|-----------------------------------------------------------------------------------------|
| Entrez GeneID    | <a href="#">26060</a>                                                                   |
| Gene Name        | APPL1                                                                                   |
| Gene Alias       | APPL, DIP13alpha                                                                        |
| Gene Description | adaptor protein, phosphotyrosine interaction, PH domain and leucine zipper containing 1 |
| Omim ID          | <a href="#">604299</a>                                                                  |
| Gene Ontology    | <a href="#">Hyperlink</a>                                                               |

**Gene Summary**

The protein encoded by this gene has been shown to be involved in the regulation of cell proliferation, and in the crosstalk between the adiponectin signalling and insulin signalling pathways. The encoded protein binds many other proteins, including RAB5A, DCC, AKT2, PIK3CA, adiponectin receptors, and proteins of the NuRD/MeCP1 complex. This protein is found associated with endosomal membranes, but can be released by EGF and translocated to the nucleus. [provided by RefSeq]

**Other Designations**

AKT2 interactor|adaptor protein containing pH domain, PTB domain and leucine zipper motif 1|signaling adaptor protein DIP13alpha

## Pathway

- [Acute myeloid leukemia](#)
- [Apoptosis](#)
- [B cell receptor signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Glioma](#)
- [Inositol phosphate metabolism](#)
- [Insulin signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [Leukocyte transendothelial migration](#)
- [Melanoma](#)
- [mTOR signaling pathway](#)

- [Natural killer cell mediated cytotoxicity](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Phosphatidylinositol signaling system](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [Toll-like receptor signaling pathway](#)
- [Type II diabetes mellitus](#)
- [VEGF signaling pathway](#)

## Disease

- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adenomatous Polyposis Coli](#)
- [Alzheimer disease](#)
- [Astrocytoma](#)
- [Barrett Esophagus](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)

- [Carcinoma](#)
- [Carcinoma in Situ](#)
- [Cardiovascular Diseases](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Common Bile Duct Neoplasms](#)
- [Cystadenocarcinoma](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Drug Toxicity](#)
- [Dyslipidemias](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [Hypercholesterolemia](#)
- [Inflammation](#)
- [Insulin Resistance](#)

- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Metabolic Syndrome X](#)
- [Microsatellite Instability](#)
- [Nasopharyngeal Neoplasms](#)
- [Necrosis](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Precursor T-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Prediabetic State](#)
- [Prostatic Neoplasms](#)
- [Psychiatric Status Rating Scales](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Schizophrenia](#)

- [Stomach Neoplasms](#)
- [Thyroid Neoplasms](#)
- [Uterine Cervical Neoplasms](#)