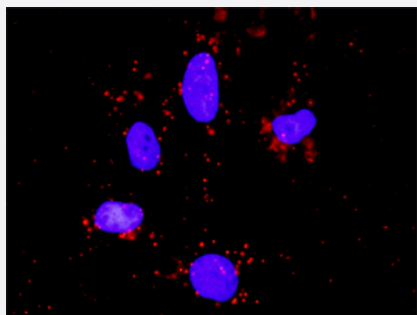


CDC42 & CASP3 Protein Protein Interaction Antibody Pair

Catalog # DI0581

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CDC42 and CASP3. HeLa cells were stained with anti-CDC42 rabbit purified polyclonal antibody 1:1200 and anti-CASP3 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 CDC42 protein, and the other against the CASP3 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 CDC42 and CASP3. HeLa cells were stained with anti-CDC42 rabbit purified polyclonal antibody 1:1200 and anti-CASP3 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. CDC42 rabbit purified polyclonal antibody (100 ug)
2. CASP3 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 — CASP3

Entrez GeneID	836
Gene Name	CASP3
Gene Alias	CPP32, CPP32B, SCA-1
Gene Description	caspase 3, apoptosis-related cysteine peptidase
Omim ID	600636
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a protein which is a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein cleaves and activates caspases 6, 7 and 9, and the protein itself is processed by caspases 8, 9 and 10. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimer's disease. Alternative splicing of this gene results in two transcript variants that encode the same protein. [provided by RefSeq]
Other Designations	OTTHUMP00000165054 PARP cleavage protease SREBP cleavage activity 1 Yama apopain caspase 3 caspase 3, apoptosis-related cysteine protease cysteine protease CPP32 procaspase3

Gene Info — CDC42

Entrez GeneID	998
Gene Name	CDC42
Gene Alias	CDC42Hs, G25K
Gene Description	cell division cycle 42 (GTP binding protein, 25kDa)
Omim ID	116952
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is a small GTPase of the Rho-subfamily, which regulates signaling pathways that control diverse cellular functions including cell morphology, migration, endocytosis and cell cycle progression. This protein is highly similar to *Saccharomyces cerevisiae* Cdc 42, and is able to complement the yeast *cdc42-1* mutant. The product of oncogene *Dbl* was reported to specifically catalyze the dissociation of GDP from this protein. This protein could regulate actin polymerization through its direct binding to Neural Wiskott-Aldrich syndrome protein (N-WASP), which subsequently activates Arp2/3 complex. Alternative splicing of this gene results in multiple transcript variants. [provided by RefSeq]

Other Designations

GTP-binding protein, 25kD|OTTHUMP00000002834|OTTHUMP00000002926|cell division cycle 42|cell division cycle 42 (GTP binding protein, 25kD)|cell division cycle 42 (GTP-binding protein, 25kD)|dJ224A6.1.1 (cell division cycle 42 (GTP-binding protein, 25kD))|d

Pathway

- [Adherens junction](#)
- [Amyotrophic lateral sclerosis \(ALS\)](#)
- [Apoptosis](#)
- [Axon guidance](#)
- [Chemokine signaling pathway](#)
- [Colorectal cancer](#)
- [Endocytosis](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [GnRH signaling pathway](#)
- [Leukocyte transendothelial migration](#)
- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Neurotrophin signaling pathway](#)

- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pathogenic Escherichia coli infection - EHEC](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)
- [VEGF signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Clubfoot](#)
- [Colorectal Neoplasms](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Disease Progression](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Gastrointestinal Stromal Tumors](#)

- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Head and Neck Neoplasms](#)
- [Hematologic Diseases](#)
- [Hepatitis B](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Lung carcinoma](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Mucocutaneous Lymph Node Syndrome](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [Multiple Sclerosis](#)
- [NARP](#)
- [Neoplasm Metastasis](#)
- [Neoplasms](#)
- [Neovascularization](#)
- [Occupational Diseases](#)
- [Parkinson disease](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)

- [Small Cell Lung Carcinoma](#)
- [Stomach Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)