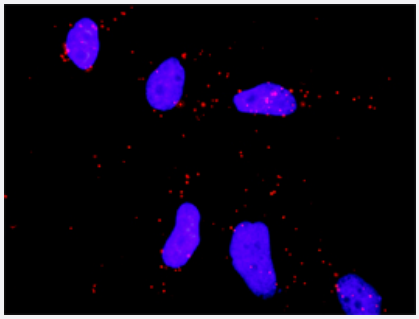
CDC42 & MAPK8 Protein Protein Interaction Antibody Pair

Catalog # DI0572 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between CDC42 and MAPK8. HeLa cells were stained with anti-CDC42 rabbit purified polyclonal antibody 1:1200 and anti-MAPK8 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 MAPK8 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 MAPK8. HeLa cells were stained with anti-CDC42 rabbit purified polyclonal antibody 1:1200 and anti-MAPK8 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. MAPK8 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 — 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

Gene Info — MAPK8

Entrez GeneID	5599
Gene Name	MAPK8
Gene Alias	JNK, JNK1, JNK1A2, JNK21B1/2, PRKM8, SAPK1
Gene Description	mitogen-activated protein kinase 8
Omim ID	601158
Gene Ontology	Hyperlink

Gene Summary	The protein encoded by this gene is a member of the MAP kinase family. MAP kinases act as an integration point for multiple biochemical signals, and are involved in a wide variety of cellular pro cesses such as proliferation, differentiation, transcription regulation and development. This kinase is activated by various cell stimuli, and targets specific transcription factors, and thus mediates im mediate-early gene expression in response to cell stimuli. The activation of this kinase by tumor-n ecrosis factor alpha (TNF-alpha) is found to be required for TNF-alpha induced apoptosis. This ki nase is also involved in UV radiation induced apoptosis, which is thought to be related to cytochro m c-mediated cell death pathway. Studies of the mouse counterpart of this gene suggested that th is kinase play a key role in T cell proliferation, apoptosis and differentiation. Four alternatively spli ced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq
Other Designations	JNK1 alpha protein kinase|JNK1 beta protein kinase|JUN N-terminal kinase|OTTHUMP0000001 9552|OTTHUMP00000019555|OTTHUMP00000019556|OTTHUMP00000019558|c-Jun N-termi nal kinase 1|mitogen-activated protein kinase 8 isoform JNK1 alpha1|mitogen-activated protein

Pathway

- Adherens junction
- Adipocytokine signaling pathway
- Axon guidance
- Chemokine signaling pathway
- Colorectal cancer
- Endocytosis
- Epithelial cell signaling in Helicobacter pylori infection
- Epithelial cell signaling in Helicobacter pylori infection
- ErbB signaling pathway
- Fc epsilon RI signaling pathway
- Fc gamma R-mediated phagocytosis
- Focal adhesion
- Focal adhesion
- GnRH signaling pathway
- GnRH signaling pathway
- Insulin signaling pathway

- Leukocyte transendothelial migration
- MAPK signaling pathway
- MAPK signaling pathway
- Neurotrophin signaling pathway
- Neurotrophin signaling pathway
- Pancreatic cancer
- 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
- Toll-like receptor signaling pathway
- Type II diabetes mellitus
- VEGF signaling pathway
- Wnt signaling pathway

Disease

- Breast cancer
- Breast Neoplasms
- Cardiovascular Diseases
- Diabetes Mellitus
- Edema
- Genetic Predisposition to Disease

- Genetic Predisposition to Disease
- Hepatitis B
- HIV Infections
- HIV Infections
- Multiple Sclerosis
- Parkinson disease