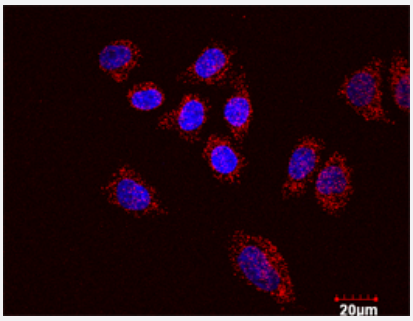
ACTN4 & CTNNB1 Protein Protein Interaction Antibody Pair

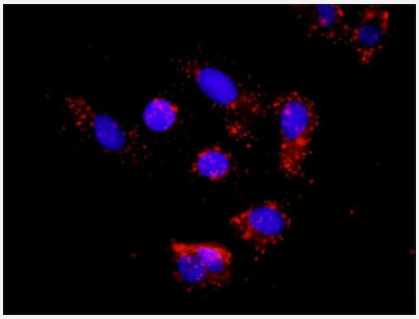
Catalog # DI0119 Size 1 Set

Applications



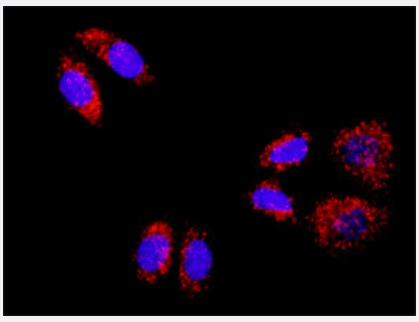
In situ Proximity Ligation Assay (Cell)

Confocal microscopy image of Proximity Ligation Assay of protein-protein interactions between ACTN4 and CTNNB1. HT-29 cells were stained with anti-ACTN4 rabbit purified polyclonal antibody 1:100 and anti-CTNNB1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



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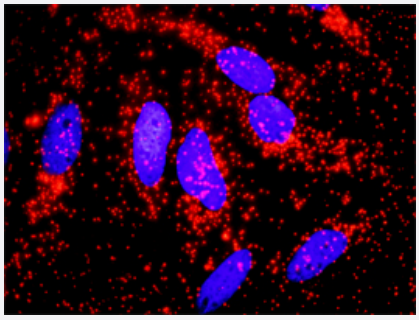
Representative image of Proximity Ligation Assay of protein-protein interactions between ACTN4 and CTNNB1. A-549 cells were stained with anti-ACTN4 rabbit purified polyclonal antibody 1:100 and anti-CTNNB1 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



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Representative image of Proximity Ligation Assay of protein-protein interactions between ACTN4 and CTNNB1. HeLa cells were stained with anti-ACTN4 rabbit purified polyclonal antibody 1:1200 and anti-CTNNB1 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 ACTN4 protein, and the other against the CTNNB1 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 ACTN4 and CTNNB1. HeLa cells were stained with anti-ACTN4 rabbit purified polyclonal antibody 1:1200 and anti-CTNNB1 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 Products	Antibody pair set content: 1. ACTN4 rabbit purified polyclonal antibody (100 ug) 2. CTNNB1 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)

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Gene Info — ACTN4

Entrez GeneID	81
Gene Name	ACTN4
Gene Alias	ACTININ-4, DKFZp686K23158, FSGS, FSGS1
Gene Description	actinin, alpha 4
Omim ID	603278 604638
Gene Ontology	Hyperlink
Gene Summary	Alpha actinins belong to the spectrin gene superfamily which represents a diverse group of cytoskeletal proteins, including the alpha and beta spectrins and dystrophins. Alpha actinin is an actin-binding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z-disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. This gene encodes a nonmuscle, alpha actinin isoform which is concentrated in the cytoplasm, and thought to be involved in metastatic processes. Mutations in this gene have been associated with focal and segmental glomerulosclerosis. [provided by RefSeq
Other Designations	actinin alpha4 isoform

Gene Info — CTNNB1

Entrez GeneID	1499
Gene Name	CTNNB1
Gene Alias	CTNNB, DKFZp686D02253, FLJ25606, FLJ37923
Gene Description	catenin (cadherin-associated protein), beta 1, 88kDa

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Omim ID	114550 116806 132600 155255
Gene Ontology	Hyperlink
Gene Summary	Beta-catenin is an adherens junction protein. Adherens junctions (AJs; also called the zonula adherens) are critical for the establishment and maintenance of epithelial layers, such as those lining organ surfaces. AJs mediate adhesion between cells, communicate a signal that neighboring cells are present, and anchor the actin cytoskeleton. In serving these roles, AJs regulate normal cell growth and behavior. At several stages of embryogenesis, wound healing, and tumor cell metastasis, cells form and leave epithelia. This process, which involves the disruption and reestablishment of epithelial cell-cell contacts, may be regulated by the disassembly and assembly of AJs. AJs may also function in the transmission of the 'contact inhibition' signal, which instructs cells to stop dividing once an epithelial sheet is complete.[supplied by OMIM
Other Designations	OTTHUMP00000165222|OTTHUMP00000165223|catenin (cadherin-associated protein), beta 1 (88kD)|catenin beta-1

Pathway

- Adherens junction
- Adherens junction
- Arrhythmogenic right ventricular cardiomyopathy (ARVC)
- Arrhythmogenic right ventricular cardiomyopathy (ARVC)
- Basal cell carcinoma
- Colorectal cancer
- Endometrial cancer
- Focal adhesion
- Focal adhesion
- Leukocyte transendothelial migration
- Leukocyte transendothelial migration
- Melanogenesis
- Pathogenic Escherichia coli infection - EHEC
- Pathways in cancer
- Prostate cancer

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- Regulation of actin cytoskeleton
- Systemic lupus erythematosus
- Thyroid cancer
- Tight junction
- Tight junction
- Wnt signaling pathway

Disease

- Adenoma
- Adrenal Cortex Neoplasms
- Alport syndrome
- Alzheimer disease
- Birth Weight
- Breast cancer
- Breast Neoplasms
- Carcinoma
- Cardiovascular Diseases
- Cardiovascular Diseases
- Cell Transformation
- Chromosome Aberrations
- Chromosome Deletion
- Cleft Lip
- Cleft Palate

- Cognition
- Colon cancer

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- Colorectal Neoplasms
- Diabetes Mellitus
- Diabetes Mellitus
- Diabetic Nephropathies
- Edema
- Edema
- Endometrial Neoplasms
- Ependymoma
- Esophageal Neoplasms
- Fibroma
- Fibromatosis
- Fractures
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Glioblastoma
- Glioma
- Glomerulosclerosis
- Head and Neck Neoplasms
- Kidney Diseases
- Kidney Failure
- Kidney Neoplasms
- Laryngeal Neoplasms
- Leukemia
- Liver Neoplasms
- Lung Neoplasms
- Meningeal Neoplasms

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- Meningioma
- Microsatellite Instability
- Mouth Neoplasms
- Neoplasm Recurrence
- Neoplasms
- Obesity
- Osteoporosis
- Ovarian cancer
- Ovarian Neoplasms
- Pancreatic cancer
- Pancreatic Neoplasms
- Pharyngeal Neoplasms
- Prostatic Neoplasms
- Proteinuria
- Pulmonary Disease
- Recurrence
- Spinal Fractures
- Stomach Neoplasms
- Urinary Bladder Neoplasms
- Werner syndrome
- Wilms Tumor

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