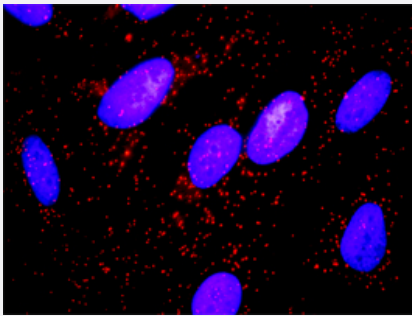


MYLK & CTTN Protein Protein Interaction Antibody Pair

Catalog # DI0129

Size 1 Set

Applications



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

Entrez GeneID [2017](#)

Gene Name CTTN

Gene Alias EMS1, FLJ34459

Gene Description cortactin

Omim ID [164765](#)

Gene Ontology [Hyperlink](#)

Gene Summary This gene is overexpressed in breast cancer and squamous cell carcinomas of the head and neck. The encoded protein is localized in the cytoplasm and in areas of the cell-substratum contacts. This gene has two roles: (1) regulating the interactions between components of adherens-type junctions and (2) organizing the cytoskeleton and cell adhesion structures of epithelia and carcinoma cells. During apoptosis, the encoded protein is degraded in a caspase-dependent manner. The aberrant regulation of this gene contributes to tumor cell invasion and metastasis. Two splice variants that encode different isoforms have been identified for this gene. [provided by RefSeq]

Other Designations 1110020L01Rik|ems1 sequence (mammary tumor and squamous cell carcinoma-associated (p80/85 src substrate)|oncogene EMS1

Gene Info — MYLK

Entrez GeneID [4638](#)

Gene Name MYLK

Gene Alias DKFZp686I10125, FLJ12216, KRP, MLCK, MLCK1, MLCK108, MLCK210, MSTP083, MYLK1, smMLCK

Gene Description myosin light chain kinase

Omim ID [600922](#)

Gene Ontology [Hyperlink](#)

Gene Summary

This gene, a muscle member of the immunoglobulin gene superfamily, encodes myosin light chain kinase which is a calcium/calmodulin dependent enzyme. This kinase phosphorylates myosin regulatory light chains to facilitate myosin interaction with actin filaments to produce contractile activity. This gene encodes both smooth muscle and nonmuscle isoforms. In addition, using a separate promoter in an intron in the 3' region, it encodes telokin, a small protein identical in sequence to the C-terminus of myosin light chain kinase, that is independently expressed in smooth muscle and functions to stabilize unphosphorylated myosin filaments. A pseudogene is located on the p arm of chromosome 3. Four transcript variants that produce four isoforms of the calcium/calmodulin dependent enzyme have been identified as well as two transcripts that produce two isoforms of telokin. Additional variants have been identified but lack full length transcripts. [provided by RefSeq]

Other Designations

OTTHUMP00000180642|OTTHUMP00000180643|myosin, light polypeptide kinase|smooth muscle myosin light chain kinase

Pathway

- [Calcium signaling pathway](#)
- [Focal adhesion](#)
- [Pathogenic Escherichia coli infection - EHEC](#)
- [Regulation of actin cytoskeleton](#)
- [Tight junction](#)
- [Vascular smooth muscle contraction](#)

Disease

- [Asthma](#)
- [Asthma](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Critical Illness](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)

- [Heart Defects](#)
- [Hypertension](#)
- [Kidney Failure](#)
- [Puerperal Disorders](#)
- [Respiratory Distress Syndrome](#)
- [Rhabdomyolysis](#)
- [Sepsis](#)
- [Streptococcal Infections](#)
- [Wounds and Injuries](#)