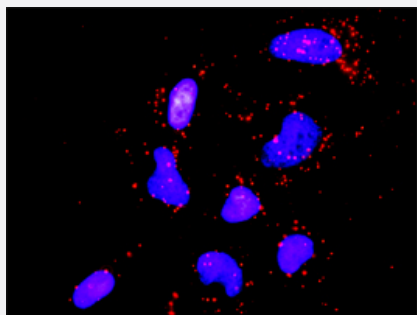


MAP2K6 & MAP3K4 Protein Protein Interaction Antibody Pair

Catalog # DI0492

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between MAP2K6 and MAP3K4. HeLa cells were stained with anti-MAP2K6 rabbit purified polyclonal antibody 1:1200 and anti-MAP3K4 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 MAP2K6 protein, and the other against the MAP3K4 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 MAP2K6 and MAP3K4. HeLa cells were stained with anti-MAP2K6 rabbit purified polyclonal antibody 1:1200 and anti-MAP3K4 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. MAP2K6 rabbit purified polyclonal antibody (100 ug)
2. MAP3K4 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 — MAP3K4

Entrez GeneID [4216](#)

Gene Name MAP3K4

Gene Alias FLJ42439, KIAA0213, MAPKKK4, MEKK4, MTK1, PRO0412

Gene Description mitogen-activated protein kinase kinase kinase 4

Omim ID [602425](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The central core of each mitogen-activated protein kinase (MAPK) pathway is a conserved cascade of 3 protein kinases: an activated MAPK kinase kinase (MAPKKK) phosphorylates and activates a specific MAPK kinase (MAPKK), which then activates a specific MAPK. While the ERK MAPKs are activated by mitogenic stimulation, the CSBP2 and JNK MAPKs are activated by environmental stresses such as osmotic shock, UV irradiation, wound stress, and inflammatory factors. This gene encodes a MAPKKK, the MEKK4 protein, also called MTK1. This protein contains a protein kinase catalytic domain at the C terminus. The N-terminal nonkinase domain may contain a regulatory domain. Expression of MEKK4 in mammalian cells activated the CSBP2 and JNK MAPK pathways, but not the ERK pathway. In vitro kinase studies indicated that recombinant MEKK4 can specifically phosphorylate and activate PRKMK6 and SERK1, MAPKKs that activate CSBP2 and JNK, respectively but cannot phosphorylate PRKMK1, an MAPKK that activates ERKs. MEKK4 is a major mediator of environmental stresses that activate the CSBP2 MAPK pathway, and a minor mediator of the JNK pathway. Two alternatively spliced transcripts encoding distinct isoforms have been described. [provided by RefSeq]

Other Designations

MAP/ERK kinase kinase 4|MAPK/ERK kinase kinase 4|SSK2/SSK22 MAP kinase kinase kinase, yeast, homolog of|dJ473J16.1 (mitogen-activated protein kinase kinase kinase 4)|predicted protein of HQ0412

Gene Info — MAP2K6

Entrez GeneID [5608](#)

Gene Name MAP2K6

Gene Alias MAPKK6, MEK6, MKK6, PRKMK6, SAPKK3

Gene Description mitogen-activated protein kinase kinase 6

Omim ID [601254](#)

Gene Ontology [Hyperlink](#)

Gene Summary

This gene encodes a member of the dual specificity protein kinase family, which functions as a mitogen-activated protein (MAP) kinase kinase. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act as an integration point for multiple biochemical signals. This protein phosphorylates and activates p38 MAP kinase in response to inflammatory cytokines or environmental stress. As an essential component of p38 MAP kinase mediated signal transduction pathway, this gene is involved in many cellular processes such as stress induced cell cycle arrest, transcription activation and apoptosis. [provided by RefSeq]

Other Designations protein kinase, mitogen-activated, kinase 6 (MAP kinase kinase 6)

Pathway

- [Amyotrophic lateral sclerosis \(ALS\)](#)
- [Fc epsilon RI signaling pathway](#)
- [GnRH signaling pathway](#)
- [GnRH signaling pathway](#)
- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Toll-like receptor signaling pathway](#)

Disease

- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Edema](#)
- [Huntington disease](#)
- [Tobacco Use Disorder](#)