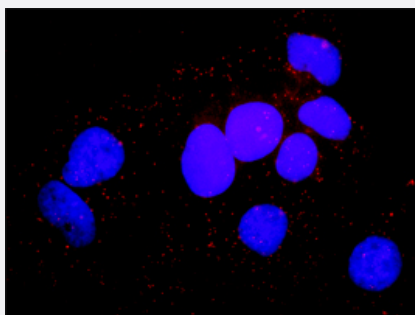


MAPK3 & MAPK14 Protein Protein Interaction Antibody Pair

Catalog # DI0008

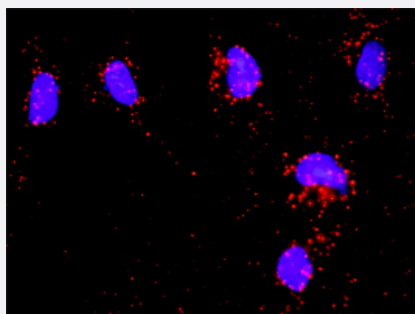
Size 1 Set

Applications



In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK3 and MAPK14. Huh7 cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-MAPK14 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK3 and MAPK14. HeLa cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-MAPK14 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 MAPK3 protein, and the other against the MAPK14 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 MAPK3 and MAPK14. HeLa cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-MAPK14 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. MAPK3 rabbit purified polyclonal antibody (100 ug)
2. MAPK14 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)

Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK3 and MAPK14. Huh7 cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-MAPK14 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Gene Info — MAPK14

Entrez GeneID[1432](#)**Gene Name**

MAPK14

Gene Alias

CSBP1, CSBP2, CSPB1, EXIP, Mxi2, PRKM14, PRKM15, RK, SAPK2A, p38, p38ALPHA

Gene Description

mitogen-activated protein kinase 14

Omim ID[600289](#)**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 processes such as proliferation, differentiation, transcription regulation and development. This kinase is activated by various environmental stresses and proinflammatory cytokines. The activation requires its phosphorylation by MAP kinase kinases (MKKs), or its autophosphorylation triggered by the interaction of MAP3K7IP1/TAB1 protein with this kinase. The substrates of this kinase include transcription regulator ATF2, MEF2C, and MAX, cell cycle regulator CDC25B, and tumor suppressor p53, which suggest the roles of this kinase in stress related transcription and cell cycle regulation, as well as in genotoxic stress response. Four alternatively spliced transcript variants of this gene encoding distinct isoforms have been reported. [provided by RefSeq]

Other Designations

Csais binding protein|MAP kinase Mxi2|MAX-interacting protein 2|cytokine suppressive anti-inflammatory drug binding protein|p38 MAP kinase|p38 mitogen activated protein kinase|p38alpha Exip|stress-activated protein kinase 2A

Gene Info — MAPK3

Entrez GeneID	5595
Gene Name	MAPK3
Gene Alias	ERK1, HS44KDAP, HUMKER1A, MGC20180, P44ERK1, P44MAPK, PRKM3
Gene Description	mitogen-activated protein kinase 3
Omim ID	601795
Gene Ontology	Hyperlink
Gene Summary	The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described. [provided by RefSeq]
Other Designations	OTTHUMP00000174538 OTTHUMP00000174540 extracellular signal-regulated kinase 1 extracellular signal-related kinase 1

Pathway

- [Acute myeloid leukemia](#)
- [Adherens junction](#)
- [Amyotrophic lateral sclerosis \(ALS\)](#)
- [Axon guidance](#)
- [B cell receptor signaling pathway](#)
- [Bladder cancer](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Dorso-ventral axis formation](#)

- [Endometrial cancer](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Gap junction](#)
- [Glioma](#)
- [GnRH signaling pathway](#)
- [GnRH signaling pathway](#)
- [Insulin signaling pathway](#)
- [Leukocyte transendothelial migration](#)
- [Long-term depression](#)
- [Long-term potentiation](#)
- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanogenesis](#)
- [Melanoma](#)
- [mTOR signaling pathway](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Neurotrophin signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)

- [Prion diseases](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [TGF-beta signaling pathway](#)
- [Thyroid cancer](#)
- [Toll-like receptor signaling pathway](#)
- [Toll-like receptor signaling pathway](#)
- [Type II diabetes mellitus](#)
- [Vascular smooth muscle contraction](#)
- [VEGF signaling pathway](#)
- [VEGF signaling pathway](#)

Disease

- [Asthma](#)
- [Autistic Disorder](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Disease Models](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)

- [Narcolepsy](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Schizophrenia](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)