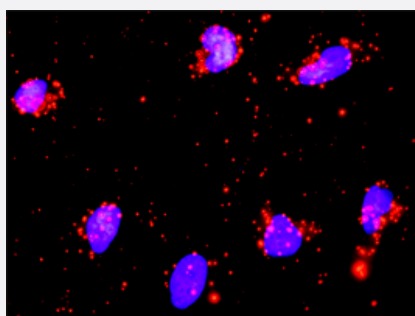


MAPK3 & DUSP9 Protein Protein Interaction Antibody Pair

Catalog # DI0154

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK3 and DUSP9. HeLa cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-DUSP9 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 DUSP9 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 DUSP9. HeLa cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-DUSP9 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. DUSP9 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 — DUSP9

Entrez GeneID [1852](#)

Gene Name DUSP9

Gene Alias MKP-4, MKP4

Gene Description dual specificity phosphatase 9

Omim ID [300134](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The protein encoded by this gene is a member of the dual specificity protein phosphatase subfamily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoserine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-activated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which is associated with cellular proliferation and differentiation. Different members of the family of dual specificity phosphatases show distinct substrate specificities for various MAP kinases, different tissue distribution and subcellular localization, and different modes of inducibility of their expression by extracellular stimuli. This gene product shows selectivity for members of the ERK family of MAP kinases, is expressed only in placenta, kidney, and fetal liver, and is localized to the cytoplasm and nucleus. [provided by RefSeq]

Other Designations OTTHUMP00000025951|OTTHUMP00000025953|map kinase phosphatase 4|serine/threonine specific protein phosphatase

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](#)
- [Axon guidance](#)
- [B cell receptor signaling pathway](#)
- [Bladder cancer](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Dorso-ventral axis formation](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Gap junction](#)
- [Glioma](#)
- [GnRH signaling pathway](#)
- [Insulin signaling pathway](#)
- [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](#)
- [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](#)
- [TGF-beta signaling pathway](#)
- [Thyroid cancer](#)
- [Toll-like receptor signaling pathway](#)
- [Type II diabetes mellitus](#)
- [Vascular smooth muscle contraction](#)
- [VEGF signaling pathway](#)

Disease

- [Asthma](#)
- [Autistic Disorder](#)

- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)