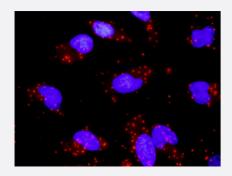


DUSP4 & MAPK9 Protein Protein Interaction Antibody Pair

Catalog # DI0417 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between DUSP4 and MAPK9. HeLa cells were stained with anti-DUSP4 rabbit purified polyclonal antibody 1:1200 and anti-MAPK9 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-prot ein interaction, one against the DUSP4 protein, and the other against the MAPK9 protein for use in <i>i</i> n 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 DUSP4 a nd MAPK9. HeLa cells were stained with anti-DUSP4 rabbit purified polyclonal antibody 1:1200 and anti-MAPK9 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-prot ein 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. DUSP4 rabbit purified polyclonal antibody (100 ug) 2. MAPK9 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 tha w cycle. Reagents should be returned to -20°C storage immediately after use.

Applications



• In situ Proximity Ligation Assay (Cell)

Gene Info — DUSP4	
Entrez GenelD	<u>1846</u>
Gene Name	DUSP4
Gene Alias	HVH2, MKP-2, MKP2, TYP
Gene Description	dual specificity phosphatase 4
Omim ID	602747
Gene Ontology	<u>Hyperlink</u>
Gene Summary	The protein encoded by this gene is a member of the dual specificity protein phosphatase subfam ily. These phosphatases inactivate their target kinases by dephosphorylating both the phosphoser ine/threonine and phosphotyrosine residues. They negatively regulate members of the mitogen-ac tivated protein (MAP) kinase superfamily (MAPK/ERK, SAPK/JNK, p38), which are associated w ith cellular proliferation and differentiation. Different members of the family of dual specificity phos phatases 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 inactivates ERK1, ERK2 and JNK, is expressed in a variety of tissues, and is localized in the nucleus. Two alternatively spliced transcript variants, encoding distinct isof orms, have been observed for this gene. In addition, multiple polyadenylation sites have been reported. [provided by RefSeq
Other Designations	MAP kinase phosphatase 2 VH1 homologous phosphatase 2 serine/threonine specific protein phosphatase

Gene Info — MAPK9	
Entrez GeneID	<u>5601</u>
Gene Name	MAPK9
Gene Alias	JNK-55, JNK2, JNK2A, JNK2ALPHA, JNK2B, JNK2BETA, PRKM9, SAPK, p54a, p54aSAPK
Gene Description	mitogen-activated protein kinase 9
Omim ID	602896
Gene Ontology	<u>Hyperlink</u>



Product Information

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 targets specific transcription factors, and thus mediates immediate-early gene expression in response to various cell stimuli. It is most closely related to MAPK8, both of which are involved in UV radiation induced apoptosis, thought to be related to the cytochrome c-mediated cell death pathway. This gene and MAPK8 are also known as c-Jun N-terminal kinases. This kinase blocks the ubiquitination of tumor suppressor p53, and thus it increases the stability of p53 in nonstressed cells. Studies of this gene's mouse counterpart suggest a key role in T-cell differentiation. Several alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by Ref Seq

Other Designations

Jun kinase |MAP kinase 9|c-Jun N-terminal kinase 2|c-Jun kinase 2|mitogen-activated protein kinase 9 isoform JNK2 alpha2|stress-activated protein kinase JNK2

Pathway

- Adipocytokine signaling pathway
- Colorectal cancer
- Epithelial cell signaling in Helicobacter pylori infection
- ErbB signaling pathway
- Fc epsilon RI signaling pathway
- Focal adhesion
- GnRH signaling pathway
- Insulin signaling pathway
- MAPK signaling pathway
- MAPK signaling pathway
- Neurotrophin signaling pathway
- Pancreatic cancer
- Pathways in cancer
- T cell receptor signaling pathway
- Toll-like receptor signaling pathway
- Type II diabetes mellitus



Wnt signaling pathway

Disease

- Breast cancer
- Breast Neoplasms
- Genetic Predisposition to Disease
- HIV Infections
- Tobacco Use Disorder