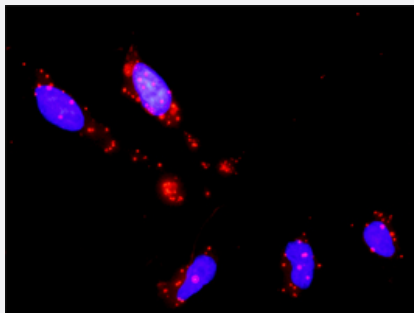


MAPK14 & DUSP1 Protein Protein Interaction Antibody Pair

Catalog # DI0516

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK14 and DUSP1. HeLa cells were stained with anti-MAPK14 rabbit purified polyclonal antibody 1:1200 and anti-DUSP1 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 MAPK14 protein, and the other against the DUSP1 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 MAPK14 and DUSP1. HeLa cells were stained with anti-MAPK14 rabbit purified polyclonal antibody 1:1200 and anti-DUSP1 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. MAPK14 rabbit purified polyclonal antibody (100 ug)
2. DUSP1 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 — 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	<p>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]</p>
Other Designations	Csaids 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 — DUSP1

Entrez GeneID	1843
Gene Name	DUSP1
Gene Alias	CL100, HVH1, MKP-1, MKP1, PTPN10
Gene Description	dual specificity phosphatase 1
Omim ID	600714
Gene Ontology	Hyperlink

Gene Summary

The expression of DUSP1 gene is induced in human skin fibroblasts by oxidative/heat stress and growth factors. It specifies a protein with structural features similar to members of the non-receptor-type protein-tyrosine phosphatase family, and which has significant amino-acid sequence similarity to a Tyr/Ser-protein phosphatase encoded by the late gene H1 of vaccinia virus. The bacterially expressed and purified DUSP1 protein has intrinsic phosphatase activity, and specifically inactivates mitogen-activated protein (MAP) kinase in vitro by the concomitant dephosphorylation of both its phosphothreonine and phosphotyrosine residues. Furthermore, it suppresses the activation of MAP kinase by oncogenic ras in extracts of *Xenopus* oocytes. Thus, DUSP1 may play an important role in the human cellular response to environmental stress as well as in the negative regulation of cellular proliferation. [provided by RefSeq]

Other Designations

serine/threonine specific protein phosphatase

Pathway

- [Amyotrophic lateral sclerosis \(ALS\)](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [Fc epsilon RI signaling pathway](#)
- [GnRH signaling pathway](#)
- [Leukocyte transendothelial migration](#)
- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [Toll-like receptor signaling pathway](#)
- [VEGF signaling pathway](#)

Disease

- [Arthritis](#)
- [Asthma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)

- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Edema](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [Kidney Failure](#)
- [Lung Neoplasms](#)
- [Multiple Sclerosis](#)
- [Narcolepsy](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Schizophrenia](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)