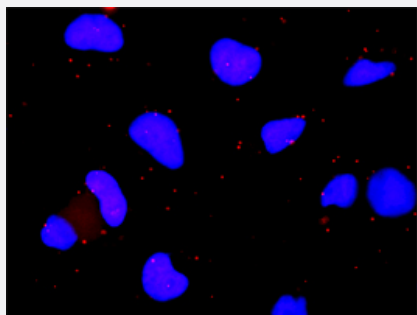


PTPN7 & MAPK14 Protein Protein Interaction Antibody Pair

Catalog # DI0535

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between PTPN7 and MAPK14. HeLa cells were stained with anti-PTPN7 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 PTPN7 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 PTPN7 and MAPK14. HeLa cells were stained with anti-PTPN7 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. PTPN7 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)

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	Csai 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 — PTPN7

Entrez GeneID	5778
Gene Name	PTPN7
Gene Alias	BPTP-4, HEPTP, LC-PTP, LPTP, PTPNI
Gene Description	protein tyrosine phosphatase, non-receptor type 7
Omim ID	176889
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is a member of the protein tyrosine phosphatase (PTP) family. PTPs are known to be signaling molecules that regulate a variety of cellular processes including cell growth, differentiation, mitotic cycle, and oncogenic transformation. This gene is preferentially expressed in a variety of hematopoietic cells, and is an early response gene in lymphokine stimulated cells. The noncatalytic N-terminus of this PTP can interact with MAP kinases and suppress the MAP kinase activities. This PTP was shown to be involved in the regulation of T cell antigen receptor (TCR) signaling, which was thought to function through dephosphorylating the molecules related to MAP kinase pathway. Two alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq]

Other Designations

OTTHUMP00000034115|dual specificity phosphatase 1|hematopoietic protein-tyrosine phosphatase|protein-tyrosine phosphatase, nonreceptor-type, stress induced

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

- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Edema](#)

- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [Narcolepsy](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Schizophrenia](#)
- [Thrombophilia](#)
- [Tobacco Use Disorder](#)