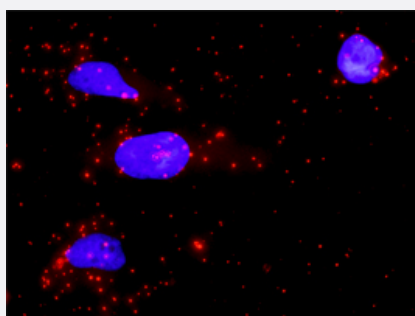


# PTPN7 & MAPK1 Protein Protein Interaction Antibody Pair

Catalog # DI0368

Size 1 Set

## Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between PTPN7 and MAPK1. HeLa cells were stained with anti-PTPN7 rabbit purified polyclonal antibody 1:1200 and anti-MAPK1 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 MAPK1 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 MAPK1. HeLa cells were stained with anti-PTPN7 rabbit purified polyclonal antibody 1:1200 and anti-MAPK1 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. MAPK1 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 — MAPK1

Entrez GeneID	<a href="#">5594</a>
Gene Name	MAPK1
Gene Alias	ERK, ERK2, ERT1, MAPK2, P42MAPK, PRKM1, PRKM2, p38, p40, p41, p41mapk
Gene Description	mitogen-activated protein kinase 1
Omim ID	<a href="#">176948</a>
Gene Ontology	<a href="#">Hyperlink</a>
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 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. The activation of this kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reported for this gene. [provided by RefSeq]
Other Designations	OTTHUMP00000174492 extracellular signal-regulated kinase 2 extracellular signal-regulated kinase-2 mitogen-activated protein kinase 2 protein tyrosine kinase ERK2

## Gene Info — PTPN7

Entrez GeneID	<a href="#">5778</a>
Gene Name	PTPN7
Gene Alias	BPTP-4, HEPTP, LC-PTP, LPTP, PTPNI
Gene Description	protein tyrosine phosphatase, non-receptor type 7
Omim ID	<a href="#">176889</a>
Gene Ontology	<a href="#">Hyperlink</a>

**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

- [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](#)

- [Anorexia Nervosa](#)
- [Asthma](#)
- [Bulimia](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [Kidney Failure](#)
- [Narcolepsy](#)
- [Ovarian Neoplasms](#)
- [Thyroid Neoplasms](#)