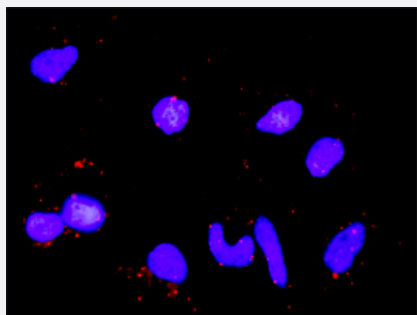


# MAPK14 & MAP3K7IP1 Protein Protein Interaction Antibody Pair

Catalog # DI0498

Size 1 Set

## Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK14 and MAP3K7IP1. HeLa cells were stained with anti-MAPK14 rabbit purified polyclonal antibody 1:1200 and anti-MAP3K7IP1 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 MAP3K7IP1 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 MAP3K7IP1. HeLa cells were stained with anti-MAPK14 rabbit purified polyclonal antibody 1:1200 and anti-MAP3K7IP1 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. MAP3K7IP1 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	<a href="#">1432</a>
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	<a href="#">600289</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 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	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 — MAP3K7IP1

Entrez GeneID	<a href="#">10454</a>
Gene Name	MAP3K7IP1
Gene Alias	3'-Tab1, MGC57664, TAB1
Gene Description	mitogen-activated protein kinase kinase kinase 7 interacting protein 1
Omim ID	<a href="#">602615</a>
Gene Ontology	<a href="#">Hyperlink</a>

## Gene Summary

The protein encoded by this gene was identified as a regulator of the MAP kinase kinase kinase MAP3K7/TAK1, which is known to mediate various intracellular signaling pathways, such as those induced by TGF beta, interleukin 1, and WNT-1. This protein interacts and thus activates TAK1 kinase. It has been shown that the C-terminal portion of this protein is sufficient for binding and activation of TAK1, while a portion of the N-terminus acts as a dominant-negative inhibitor of TGF beta, suggesting that this protein may function as a mediator between TGF beta receptors and TAK1. This protein can also interact with and activate the mitogen-activated protein kinase 14 (MAPK14/p38alpha), and thus represents an alternative activation pathway, in addition to the MAPKK pathways, which contributes to the biological responses of MAPK14 to various stimuli. Alternatively spliced transcript variants encoding distinct isoforms have been reported. [provided by RefSeq]

## Other Designations

TAK1-binding protein 1|transforming growth factor beta-activated kinase-binding protein 1

## 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](#)
- [Toll-like receptor signaling pathway](#)
- [VEGF signaling pathway](#)

## Disease

- [Arthritis](#)
- [Cardiovascular Diseases](#)
- [Crohn Disease](#)

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