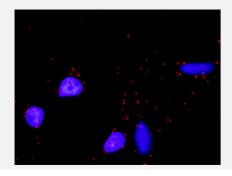


# MAPK14 & MAX Protein Protein Interaction Antibody Pair

Catalog # DI0533 Size 1 Set

# **Applications**



Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK14 and MAX. HeLa cells were stained with anti-MAPK14 rabbit purified polyclonal antibody 1:1200 and anti-MAX 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 MAPK14 protein, and the other against the MAX protein for use in <u>in situ</u> 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 MAX. HeLa cells were stained with anti-MAPK14 rabbit purified polyclonal antibody 1:1200 and anti-MAX 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. MAX 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 — MAPK14		
Entrez GenelD	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	<u>Hyperlink</u>	
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-infl ammatory drug binding protein p38 MAP kinase p38 mitogen activated protein kinase p38alpha Exip stress-activated protein kinase 2A	

Gene Info — MAX	
Entrez GeneID	<u>4149</u>
Gene Name	MAX
Gene Alias	MGC10775, MGC11225, MGC18164, MGC34679, MGC36767, bHLHd4, bHLHd5, bHLHd6, bHLHd7, bHLHd8, orf1
Gene Description	MYC associated factor X
Omim ID	<u>154950</u>
Gene Ontology	<u>Hyperlink</u>



### **Product Information**

#### **Gene Summary**

The protein encoded by this gene is a member of the basic helix-loop-helix leucine zipper (bHLHZ) family of transcription factors. It is able to form homodimers and heterodimers with other family members, which include Mad, Mxi1 and Myc. Myc is an oncoprotein implicated in cell proliferation , differentiation and apoptosis. The homodimers and heterodimers compete for a common DNA t arget site (the E box) and rearrangement among these dimer forms provides a complex system of transcriptional regulation. Multiple alternatively spliced transcript variants have been described for this gene but the full-length nature for some of them is unknown. [provided by RefSeq

#### **Other Designations**

MAX protein|helix-loop-helix zipper protein|myc-associated factor X

### **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
- Pathways in cancer
- Small cell lung cancer
- 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