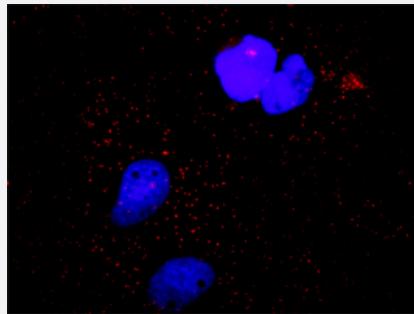


# MAPK3 & CASP9 Protein Protein Interaction Antibody Pair

Catalog # DI0013 Size 1 Set

## Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK3 and CASP9. Huh7 cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-CASP9 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

<b>Product Description</b>	This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the MAPK3 protein, and the other against the CASP9 protein for use in <a href="#">in situ Proximity Ligation Assay</a> . See Publication Reference below.
<b>Reactivity</b>	Human
<b>Quality Control Testing</b>	Protein protein interaction immunofluorescence result. Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK3 and CASP9. Huh7 cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-CASP9 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.
<b>Supplied Product</b>	Antibody pair set content: 1. MAPK3 rabbit purified polyclonal antibody (100 ug) 2. CASP9 mouse monoclonal antibody (40 ug) *Reagents are sufficient for at least 30-50 assays using recommended protocols.
<b>Storage Instruction</b>	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 — CASP9

Entrez GeneID	<a href="#">842</a>
Gene Name	CASP9
Gene Alias	APAF-3, APAF3, CASPASE-9c, ICE-LAP6, MCH6
Gene Description	caspase 9, apoptosis-related cysteine peptidase
Omim ID	<a href="#">602234</a>
Gene Ontology	<a href="#">Hyperlink</a>
Gene Summary	This gene encodes a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein is processed by caspase APAF1; this step is thought to be one of the earliest in the caspase activation cascade. Alternative splicing results in two transcript variants which encode different isoforms. [provided by RefSeq]
Other Designations	ICE-like apoptotic protease 6 OTTHUMP00000002322 OTTHUMP00000002323 OTTHUMP0000044594 apoptotic protease MCH-6 apoptotic protease activating factor 3 caspase 9 caspase 9, apoptosis-related cysteine protease

## Gene Info — MAPK3

Entrez GeneID	<a href="#">5595</a>
Gene Name	MAPK3
Gene Alias	ERK1, HS44KDAP, HUMKER1A, MGC20180, P44ERK1, P44MAPK, PRKM3
Gene Description	mitogen-activated protein kinase 3
Omim ID	<a href="#">601795</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 in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described. [provided by RefSeq]

**Other Designations**

OTTHUMP00000174538|OTTHUMP00000174540|extracellular signal-regulated kinase 1|extracellular signal-related kinase 1

**Pathway**

- [Acute myeloid leukemia](#)
- [Adherens junction](#)
- [Amyotrophic lateral sclerosis \(ALS\)](#)
- [Apoptosis](#)
- [Axon guidance](#)
- [B cell receptor signaling pathway](#)
- [Bladder cancer](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Colorectal cancer](#)
- [Dorso-ventral axis formation](#)
- [Endometrial cancer](#)
- [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](#)
- [Melanogenesis](#)
- [Melanoma](#)
- [mTOR signaling pathway](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Non-small cell lung cancer](#)
- [p53 signaling pathway](#)
- [Pancreatic cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prion diseases](#)
- [Prostate cancer](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)
- [Small cell lung cancer](#)
- [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](#)
- [VEGF signaling pathway](#)

## Disease

- [Adenocarcinoma](#)
- [Asthma](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Autistic Disorder](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Clubfoot](#)
- [Colorectal Neoplasms](#)
- [Crohn Disease](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Disease Progression](#)
- [Edema](#)
- [Esophageal Neoplasms](#)
- [Gastrointestinal Stromal Tumors](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)

- [Hematologic Diseases](#)
- [Hepatitis](#)
- [Hodgkin Disease](#)
- [Intestinal Fistula](#)
- [Kidney Failure](#)
- [Leukemia](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Multiple Myeloma](#)
- [Multiple Sclerosis](#)
- [NARP](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neovascularization](#)
- [Occupational Diseases](#)
- [Pancreatic Neoplasms](#)
- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Small Cell Lung Carcinoma](#)
- [Stomach Neoplasms](#)
- [Substance-Related Disorders](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)

- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)