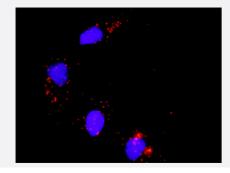


# MAPK3 & ATF2 Protein Protein Interaction Antibody Pair

Catalog # DI0355 Size 1 Set

### **Applications**



Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK3 and ATF2. HeLa cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-ATF2 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 MAPK3 protein, and the other against the ATF2 protein for use in <u>in s</u> <u>itu Proximity Ligation Assay</u> . 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 MAPK3 a nd ATF2. HeLa cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and a nti-ATF2 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein i nteraction complex. The images were analyzed using an optimized freeware (BlobFinder) download f rom The Centre for Image Analysis at Uppsala University.
Supplied Product	Antibody pair set content:  1. MAPK3 rabbit purified polyclonal antibody (100 ug)  2. ATF2 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 — ATF2	
Entrez GenelD	1386
Gene Name	ATF2
Gene Alias	CRE-BP1, CREB2, HB16, MGC111558, TREB7
Gene Description	activating transcription factor 2
Omim ID	<u>123811</u>
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a transcription factor that is a member of the leucine zipper family of DNA bin ding proteins. This protein binds to the cAMP-responsive element (CRE), an octameric palindrom e. The protein forms a homodimer or heterodimer with c-Jun and stimulates CRE-dependent tran scription. The protein is also a histone acetyltransferase (HAT) that specifically acetylates histone s H2B and H4 in vitro; thus it may represent a class of sequence-specific factors that activate tran scription by direct effects on chromatin components. Additional transcript variants have been iden tified but their biological validity has not been determined. [provided by RefSeq
Other Designations	OTTHUMP00000163262 activating transcription factor 2 splice variant ATF2-var2 cAMP respons ive element binding protein 2, formerly

Gene Info — MAPK3		
Entrez GenelD	<u>5595</u>	
Gene Name	MAPK3	
Gene Alias	ERK1, HS44KDAP, HUMKER1A, MGC20180, P44ERK1, P44MAPK, PRKM3	
Gene Description	mitogen-activated protein kinase 3	
Omim ID	<u>601795</u>	
Gene Ontology	<u>Hyperlink</u>	
Gene Summary	The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also kno wn 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
- 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

#### Disease

- Asthma
- Autistic Disorder



- Bipolar Disorder
- Cardiovascular Diseases
- Diabetes Mellitus
- Disease Models
- Edema
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Schizophrenia
- Tobacco Use Disorder