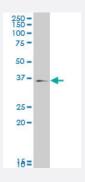


# MAPK14 monoclonal antibody (M01), clone 3D5

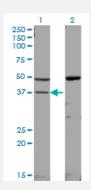
Catalog # H00001432-M01 Size 100 ug

# **Applications**



#### Western Blot (Cell lysate)

MAPK14 monoclonal antibody (M01), clone 3D5 Western Blot analysis of MAPK14 expression in C32 ( Cat # L002V1 ).

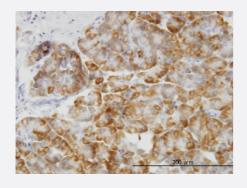


#### Western Blot (Transfected lysate)

Western Blot analysis of MAPK14 expression in transfected 293T cell line by MAPK14 monoclonal antibody (M01), clone 3D5.

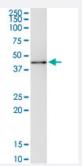
Lane 1: MAPK14 transfected lysate(41.3 KDa).

Lane 2: Non-transfected lysate.



# Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections)

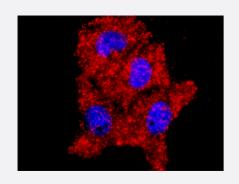
Immunoperoxidase of monoclonal antibody to MAPK14 on formalin-fixed paraffin-embedded human pancreas. [antibody concentration 3 ug/ml]



## Immunoprecipitation

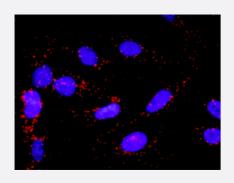
Immunoprecipitation of MAPK14 transfected lysate using anti-MAPK14 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with MAPK14 monoclonal antibody.





### In situ Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between AKT1 and MAPK14. Huh7 cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-MAPK14 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



## In situ Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between AKT1 and MAPK14. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-MAPK14 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Western Blot detection against Immunogen (36.74 KDa).

Specification	
Product Description	Mouse monoclonal antibody raised against a partial recombinant MAPK14.
Immunogen	MAPK14 (AAH31574, 260 a.a. ~ 360 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	QSLTQMPKMNFANVFIGANPLAVDLLEKMLVLDSDKRITAAQALAHAYFAQYHDPDDEPVADPYD QSFESRDLLIDEWKSLTYDEVISFVPPPLDQEEMES
Host	Mouse
Reactivity	Human
Isotype	lgG1 Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein.  Western Blot detection against Immunogen (36.74 KDa).



#### **Product Information**

Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

# Applications

Western Blot (Cell lysate)

MAPK14 monoclonal antibody (M01), clone 3D5 Western Blot analysis of MAPK14 expression in C32 ( Cat # L002V1 ).

**Protocol Download** 

Western Blot (Transfected lysate)

Western Blot analysis of MAPK14 expression in transfected 293T cell line by MAPK14 monoclonal antibody (M01), clone 3D5.

Lane 1: MAPK14 transfected lysate(41.3 KDa).

Lane 2: Non-transfected lysate.

**Protocol Download** 

Western Blot (Recombinant protein)

**Protocol Download** 

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunoperoxidase of monoclonal antibody to MAPK14 on formalin-fixed paraffin-embedded human pancreas. [antibody concentration 3 ug/ml]

**Protocol Download** 

Immunoprecipitation

Immunoprecipitation of MAPK14 transfected lysate using anti-MAPK14 monoclonal antibody and Protein A Magnetic Bead, and immunoblotted with MAPK14 monoclonal antibody.

**Protocol Download** 

- ELISA
- In situ Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between AKT1 and MAPK14. Huh7 cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-MAPK14 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



In situ Proximity Ligation Assay (Cell)

Proximity Ligation Analysis of protein-protein interactions between AKT1 and MAPK14. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal 1:1200 and anti-MAPK14 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Gene Info — MAPK14	
Entrez GenelD	1432
GeneBank Accession#	BC031574
Protein Accession#	AAH31574
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	<u>600289</u>
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

# **Publication Reference**

p38 predicts depression and poor outcome in esophageal cancer.

Cheng Y, Qiao Z, Dang C, Zhou B, Li S, Zhang W, Jiang J, Song Y, Zhang J, Diao D.

Oncology Letters 2017 Dec; 4(6):7241.

Application: IHC-P, Human, Human esophageal cancer



# **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
- Neurotrophin signaling pathway
- 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