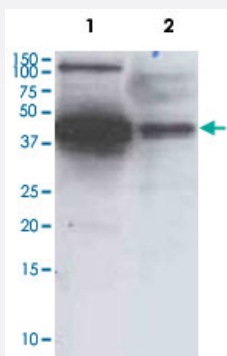


# MAPK1/MAPK3 monoclonal antibody, clone SB46b (Biotin)

Catalog # MAB5901      Size 500 ug

## Applications



### Western Blot

Human PBMC (Lane 1) and spleen (Lane 2) lysate was stained with MAPK1/3 monoclonal antibody, clone SB46b. Goat anti-Mouse IgG2a was used to develop.

## Specification

**Product Description** Mouse monoclonal antibody raised against recombinant MAPK1/MAPK3.

**Immunogen** Recombinant protein corresponding to human MAPK1/MAPK3.

**Host** Mouse

**Reactivity** Human

**Specificity** Reacts with human Erk 1 and human Erk2.

**Form** Liquid

**Conjugation** Biotin

**Isotype** IgG2a

**Recommend Usage** The optimal working dilution should be determined by the end user.

**Storage Buffer** In PBS (0.09% sodium azide)

**Storage Instruction** Store at 4°C.

**Note**

This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

## Applications

- Western Blot

Human PBMC (Lane 1) and spleen (Lane 2) lysate was stained with MAPK1/3 monoclonal antibody, clone SB46b. Goat anti-Mouse IgG2a was used to develop.

- Immunoprecipitation

## Gene Info — MAPK1

Entrez GeneID [5594](#)

Gene Name MAPK1

Gene Alias ERK, ERK2, ERT1, MAPK2, P42MAPK, PRKM1, PRKM2, p38, p40, p41, p41mapk

Gene Description mitogen-activated protein kinase 1

Omim ID [176948](#)

Gene Ontology [Hyperlink](#)

**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 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. The activation of this kinase requires its phosphorylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the stimulated cells, where it phosphorylates nuclear targets. Two alternatively spliced transcript variants encoding the same protein, but differing in the UTRs, have been reported for this gene. [provided by RefSeq]

**Other Designations** OTTHUMP00000174492|extracellular signal-regulated kinase 2|extracellular signal-regulated kinase-2|mitogen-activated protein kinase 2|protein tyrosine kinase ERK2

## Gene Info — MAPK3

Entrez GeneID [5595](#)

Gene Name MAPK3

|                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Alias</b>         | ERK1, HS44KDAP, HUMKER1A, MGC20180, P44ERK1, P44MAPK, PRKM3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Gene Description</b>   | mitogen-activated protein kinase 3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Omim ID</b>            | <a href="#">601795</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Gene Ontology</b>      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Gene Summary</b>       | 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] |
| <b>Other Designations</b> | OTTHUMP00000174538 OTTHUMP00000174540 extracellular signal-regulated kinase 1 extracellular signal-related kinase 1                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

## Publication Reference

- [Hydrophobic as well as charged residues in both MEK1 and ERK2 are important for their proper docking.](#)  
 Xu Be, Stippec S, Robinson FL, Cobb MH.  
 The Journal of Biological Chemistry 2001 May; 276(28):26509.  
 Application: IP, IF, Human, HEK 293 cells
- [Mitogen-activated protein \(MAP\) kinase pathways: regulation and physiological functions.](#)  
 Pearson G, Robinson F, Beers Gibson T, Xu BE, Karandikar M, Berman K, Cobb MH.  
 Endocrine Reviews 2001 Apr; 22(2):153.
- [Molecular cloning, expression, and characterization of the human mitogen-activated protein kinase p44erk1.](#)  
 Charest DL, Mordret G, Harder KW, Jirik F, Pelech SL.  
 Molecular and Cellular Biology 1993 Aug; 13(8):4679.

## Pathway

- [Acute myeloid leukemia](#)
- [Acute myeloid leukemia](#)
- [Adherens junction](#)
- [Adherens junction](#)

- [Axon guidance](#)
- [Axon guidance](#)
- [B cell receptor signaling pathway](#)
- [B cell receptor signaling pathway](#)
- [Bladder cancer](#)
- [Bladder cancer](#)
- [Chemokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Colorectal cancer](#)
- [Dorso-ventral axis formation](#)
- [Dorso-ventral axis formation](#)
- [Endometrial cancer](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Gap junction](#)

- [Gap junction](#)
- [Glioma](#)
- [Glioma](#)
- [GnRH signaling pathway](#)
- [GnRH signaling pathway](#)
- [Insulin signaling pathway](#)
- [Insulin signaling pathway](#)
- [Long-term depression](#)
- [Long-term depression](#)
- [Long-term potentiation](#)
- [Long-term potentiation](#)
- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanogenesis](#)
- [Melanogenesis](#)
- [Melanoma](#)
- [Melanoma](#)
- [mTOR signaling pathway](#)
- [mTOR signaling pathway](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Neurotrophin signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)

- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prion diseases](#)
- [Prion diseases](#)
- [Prostate cancer](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)
- [Renal cell carcinoma](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [TGF-beta signaling pathway](#)
- [TGF-beta signaling pathway](#)
- [Thyroid cancer](#)
- [Thyroid cancer](#)
- [Toll-like receptor signaling pathway](#)
- [Toll-like receptor signaling pathway](#)
- [Type II diabetes mellitus](#)
- [Type II diabetes mellitus](#)
- [Vascular smooth muscle contraction](#)
- [Vascular smooth muscle contraction](#)
- [VEGF signaling pathway](#)
- [VEGF signaling pathway](#)

## Disease

- [Anorexia Nervosa](#)
- [Asthma](#)
- [Asthma](#)
- [Autistic Disorder](#)
- [Bulimia](#)
- [Cardiovascular Diseases](#)
- [Diabetes Mellitus](#)
- [Disease Models](#)
- [Disease Models](#)
- [Edema](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [HIV Infections](#)
- [Kidney Failure](#)
- [Narcolepsy](#)
- [Ovarian Neoplasms](#)
- [Thyroid Neoplasms](#)