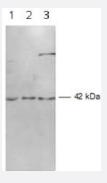


# MAPK1 polyclonal antibody

Catalog # PAB9958 Size 100 uL

## **Applications**



### Western Blot (Cell lysate)

Western blot using MAPK1 polyclonal antibody (Cat # PAB9958) shows detection of MAPK1 in several whole cell lysates: HeLa (lane 1), A-431 (lane 2), and NIH/3T3 (lane 3).

Detection occurs using a 1 : 1,000 dilution of the primary antibody followed by 1 : 4,000 dilution of HRP Goat-a-Rabbit with visualization via ECL.

Film exposure was approximately 1'.

| Specification           |  |
|-------------------------|--|
| Product Description     | Rabbit polyclonal antibody raised against partial recombinant MAPK1.   |
| Immunogen               | Recombinant GST fusion protein corresponding to C-terminus of human MAPK1.   |
| Host                    | Rabbit   |
| Reactivity              | Human, Mouse, Rat  |
| Form                    | Liquid   |
| Quality Control Testing | Antibody Reactive Against Recombinant Protein.   |
| Recommend Usage         | ELISA (1:2000-1:10000) Western Blot (1:1000-1:2000) Immunoprecipitation (5.0 ug/mg) The optimal working dilution should be determined by the end user. |
| Storage Buffer          | In 20 mM KH <sub>2</sub> PO <sub>4</sub> , 150 mM NaCl, pH 7.2 (0.01% sodium azide)  |
| Storage Instruction     | Store at 4°C. For long term storage store at -20°C. Aliquot to avoid repeated freezing and thawing.  |



#### **Product Information**

Note

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

## **Applications**

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- Immunoprecipitation
- Enzyme-linked Immunoabsorbent Assay

| Gene Info — MAPK1  |   |
|--------------------|---|
| Entrez GenelD      | <u>5594</u>   |
| Protein Accession# | P28482;NP_002736  |
| 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            | <u>176948</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 as an integration point for multiple bioche mical signals, and are involved in a wide variety of cellular processes such as proliferation, differe ntiation, transcription regulation and development. The activation of this kinase requires its phosp horylation by upstream kinases. Upon activation, this kinase translocates to the nucleus of the sti mulated 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 kin ase-2 mitogen-activated protein kinase 2 protein tyrosine kinase ERK2   |



### **Publication Reference**

The role of transient ERK2 signals in fibronectin- and insulin-mediated DNA synthesis.

Asthagiri AR, Reinhart CA, Horwitz AF, Lauffenburger DA.

Journal of cell Science 2000 Dec; 113 Pt 24:4499.

Application: KA, Mouse, CHO cells

Organization and regulation of mitogen-activated protein kinase signaling pathways.

Garrington TP, Johnson GL.

Current Opinion in Cell Biology 1999 Apr; 11(2):211.

Application: IHC, WB-Ce, WB-Tr, Human, Cancers, Mammalian cells

• The MAP kinase ERK2 inhibits the cyclic AMP-specific phosphodiesterase HSPDE4D3 by phosphorylating it at Ser579.

Hoffmann R, Baillie GS, MacKenzie SJ, Yarwood SJ, Houslay MD.

The EMBO Journal 1999 Feb; 18(4):893.

Application: WB-Ce, Monkey, COS-1 cells

### **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
- 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

- Anorexia Nervosa
- Asthma
- Bulimia
- Cardiovascular Diseases
- Diabetes Mellitus
- Disease Models
- Edema
- Genetic Predisposition to Disease
- HIV Infections
- Kidney Failure
- Narcolepsy
- Ovarian Neoplasms
- Thyroid Neoplasms