

Human ERK2/MAPK1 antibody

Catalog Number: ATGA0182

PRODUCT INFORMATION

Catalog number

ATGA0182

Clone No.

AT1A4

Product type

Monoclonal Antibody

UnitProt No.

P28482

NCBI Accession No.

NP_620407

Alternative Names

PRKM2, PRKM1, p42MAPK, p41MAPK, p41, p40, p38, Mitogen-activated protein kinase 1 MAP kinase 2, Mitogen-activated protein kinase 1, MAPK2, MAPK1, Extracellular Signal Regulated Kinase 2, ERT1, ERK2, ERK, ,

PRODUCT SPECIFICATION

Antibody Host

Mouse

Reacts With

Human

Concentration

1mg/ml (determined by BCA assay)

Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

Immunogen

Recombinant human MAPK1 (1-360) purified from E.coli

Isotype

IgG2b kappa

Purification Note

By protein-G affinity chromatography

Application

ELISA, WB, ICC/IF

Usage

The antibody has been tested by ELISA, Western blot and Immunofluorescence analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results. Recommended dilution range for Western blot analysis and Immunofluorescence is 1:500 ~ 3000. Recommended starting dilution is 1:500

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Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

Mitogen-activated protein kinases (MAPKs) are reported to be critical regulatory factors for the growth and migration of various cell types including vascular smooth muscle cells (VSMCs). It has also been reported that the activation of the MAP kinase family, extracellular signal regulated kinases 1/2 (ERK1/2), and c-Jun N-terminal kinase (JNK) via Src activation is important for AII-induced migration of VSMCs. MAPKs are intracellular signal-transduction pathways that have been shown to play a central role in the development of injury following ischemia in the brain and heart. MAPKs regulate gene expression, which is important in cell injury/repair and proliferation/differentiation.

General References

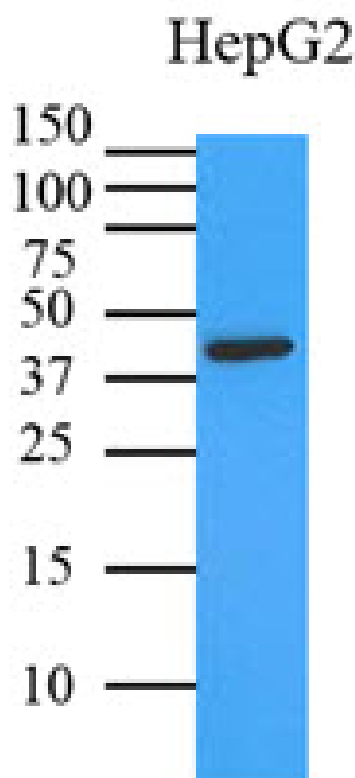
Le A, et al. (2010) Proc Natl Acad Sci U S A, 107(5):2037-42.

Gesslein B, et al. (2010) Mol Vis, 16:392-407.

Lai EW, et al. (2004) J Invest Surg, 17:45-53.

DATA

Western blot analysis (WB)

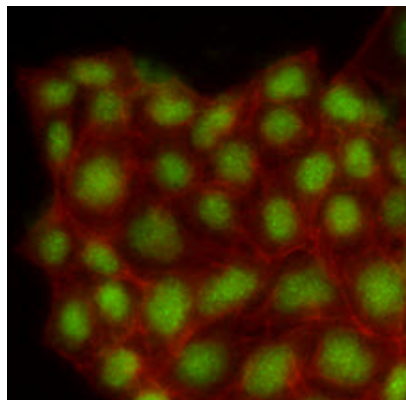


Cell lysates of HepG2 (35ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human MAPK1 (1:3000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system.

Immunocytochemistry/Immunofluorescence (ICC/IF)

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Immunofluorescence of human MCF7 cells stained with Phalloidin-TRITC (Red) for Actin staining and monoclonal anti-human MAPK1 antibody (1:500) with Alexa 488 (Green).