Polyclonal Antibody Catalog #: APRab04631



Summary

Production Name ERK 1/2 (phospho Thr202) Rabbit Polyclonal Antibody

Description Rabbit Polyclonal Antibody

Host Rabbit

Application IF,WB,IHC,ELISA **Reactivity** Human,Mouse,Rat

Performance

Conjugation Unconjugated

Modification Phospho Antibody

Isotype IgG

Clonality Polyclonal Form Liquid

Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw Storage

cycles.

Buffer Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.

Purification Affinity purification

Immunogen

Gene Name MAPK1/MAPK3

MAPK3; ERK1; PRKM3; Mitogen-activated protein kinase 3; MAP kinase 3; MAPK 3;

Alternative Names ERT2; Extracellular signal-regulated kinase 1; ERK-1; Insulin-stimulated MAP2 kinase;

MAP kinase isoform p44; p44-MAPK; Microtubule-associated protein 2 kinase; p

Gene ID 5595/5594

P27361/P28482.The antiserum was produced against synthesized peptide derived from

SwissProt ID human p44/42 MAP Kinase around the phosphorylation site of Thr202. AA range:169-

218

Application

Dilution Ratio IF 1:50-200 WB 1:500-2000, IHC 1:50-300 IHC 1:50-300

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Molecular Weight 44+42kD

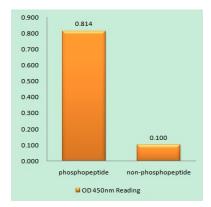
Background

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, Jul 2008],catalytic activity:ATP + a protein = ADP + a phosphoprotein.,cofactor:Magnesium.,domain:The TXY motif contains the threonine and tyrosine residues whose phosphorylation activates the MAP kinases.,enzyme regulation:Activated by tyrosine phosphorylation in response to insulin and NGF.,function:Involved in both the initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors such as ELK-1. Phosphorylates EIF4EBP1; required for initiation of translation. Phosphorylates microtubule-associated protein 2 (MAP2). Phosphorylates SPZ1 (By similarity). Phosphorylates heat shock factor protein 4 (HSF4).,PTM:Dually phosphorylated on Thr-202 and Tyr-204, which activates the enzyme.,similarity:Belongs to the protein kinase superfamily. CMGC Ser/Thr protein kinase family. MAP kinase subfamily.,similarity:Contains 1 protein kinase domain.,subunit:Interacts with MORG1 (By similarity). Binds to HIV-1 Nef. This interaction inhibits its kinase activity. Interacts with HSF4 and NISCH..

Research Area

Regulates Angiogenesis; Regulation_Microtubule; Regulation of Actin Dynamics; Stem cell pathway; T_Cell_Receptor; Insulin Receptor; Cell Growth; Toll Like; MAPK ERK Growth;MAPK G Protein; B Cell Antigen; PI3K/Akt; mTOR

Image Data

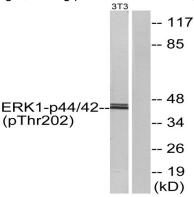


Enzyme-Linked Immunosorbent Assay (Phospho-ELISA) for Immunogen Phosphopeptide (Phospho-left) and Non-

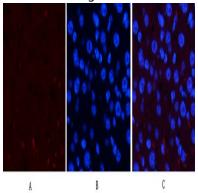
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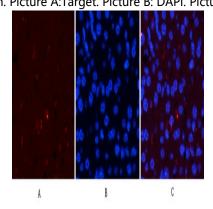
Phosphopeptide (Phospho-right), using p44/42 MAP Kinase (Phospho-Thr202) Antibody



Western blot analysis of lysates from NIH/3T3 cells treated with IFN 2500U/ml 30 ', using p44/42 MAP Kinase (Phospho-Thr202) Antibody. The lane on the right is blocked with the phospho peptide.



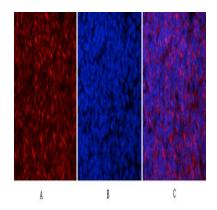
Immunofluorescence analysis of mouse-liver tissue. 1,ERK 1/2 (phospho Thr202) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



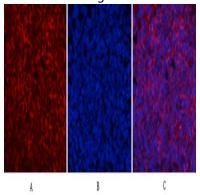
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Immunofluorescence analysis of mouse-spleen tissue. 1,ERK 1/2 (phospho Thr202) Polyclonal Antibody (red) was diluted at 1:200 (4°C,overnight) . 2, Cy3 labled Secondary antibody was diluted at 1:300 (room temperature, 50min) .3, Picture B: DAPI (blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



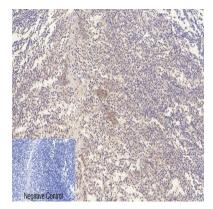
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Immunohistochemical analysis of paraffin-embedded Human-uterus-cancer tissue. 1,ERK 1/2 (phospho Thr202) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

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Immunohistochemical analysis of paraffin-embedded Human-Tonsil tissue. 1,ERK 1/2 (phospho Thr202) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody



Immunohistochemical analysis of paraffin-embedded Human-colon tissue. 1,ERK 1/2 (phospho Thr202) Polyclonal Antibody was diluted at 1:200 (4°C,overnight) . 2, Sodium citrate pH 6.0 was used for antibody retrieval (>98°C,20min) . 3,Secondary antibody was diluted at 1:200 (room tempeRature, 30min) . Negative control was used by secondary antibody only.

Note

For research use only.