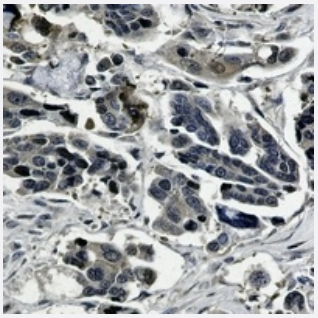
RecomAb™ Sm Size

MAPK1 recombinant monoclonal antibody

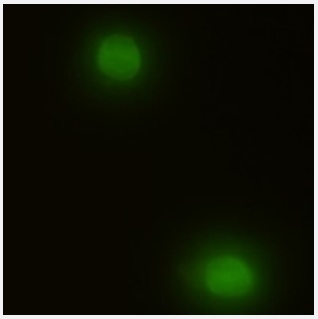
Catalog # RAB09108 Size 50 uL

Applications



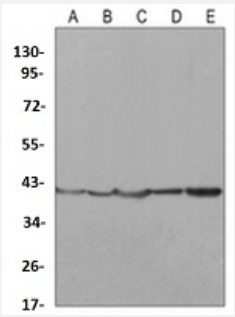
Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of human cholangiocarcinoma formalin fixed paraffin embedded tissue section using ERK2 recombinant monoclonal antibody (Cat # RAB09108). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.41). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescence

Immunofluorescent analysis of K562 cells with ERK2 recombinant monoclonal antibody (Cat # RAB09108). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.



Western Blot

Western blot analysis of K562 (A), rat brain (B), C6 (C), NIH3T3 (D), Hela (E) whole cell lysates with ERK2 recombinant monoclonal antibody (Cat # RAB09108).

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Specification

Product Description	Rabbit recombinant monoclonal antibody raised against human MAPK1.
Antibody Species	Rabbit
Immunogen	Original antibody is raised against a synthetic peptide of human ERK2.
Theoretical MW (kDa)	42
Reactivity	Human, Mouse, Rat
Specificity	Recognizes endogenous levels of ERK2 protein.
Form	Liquid
Preparation Method	Mammalian cell (HEK293) expression system
Purification	Immunogen affinity chromatography
Isotype	IgG
Recommend Usage	Immunocytochemistry (1:50-1:100) Immunofluorescence (1:50-1:100) Immunohistochemistry (1:50-1:100) Immunoprecipitation(1:10-1:50) Western Blot (1:500-1:1000) The optimal working dilution should be determined by the end user.
Storage Buffer	In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA)
Storage Instruction	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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Gene Info — MAPK1

Entrez GeneID	5594
Protein Accession#	P28482
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 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

Pathway

- Acute myeloid leukemia
- Adherens junction

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- 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

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- 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

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- Thyroid Neoplasms

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