MAPK1 (phospho T185/Y187) monoclonal antibody, clone MAPK-YT

Catalog # MAB1463 Size 100 ug

Specification

Product Description	Mouse monoclonal antibody raised against synthetic phosphopeptide of MAPK1.
Immunogen	Synthetic phosphopeptide corresponding to residues surrounding T185/Y187 of human MAPK1.
Host	Mouse
Reactivity	Human, Mouse, Rat, Yeast
Form	Lyophilized
Purification	Affinity purification
Isotype	IgG1
Recommend Usage	Western Blot (0.25-0.5 ug/mL) Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) (0.4-1 ug/mL) The optimal working dilution should be determined by the end user.
Storage Buffer	Lyophilized from 1.2% sodium acetate (2 mg BSA, 0.01 mg sodium azide)
Storage Instruction	Store at -20°C on dry atmosphere. After reconstitution with 1 mL of 1.2% sodium acetate or neutral PBS and concentration will be 100 u g/mL, store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.
Note	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only.

Applications

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

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- Western Blot

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

Publication Reference

- Itaconate targets the ERK2 signal to suppress estrogen receptor-positive breast cancer cell growth.

  Begüm Karakoç., Onur Özdağ., Hilal Demirkıran., Gamze Cebeci., Bayram Şahin.

  Clinical Oral Investigations 2025 Apr; 29(4):4213.

  Application：Western blot, Mouse (C57BL/6J), Kidney tissue lysates

- Mek1/2 MAPK kinases are essential for Mammalian development, homeostasis, and Raf-induced hyperplasia.

  Scholl FA, Dumesic PA, Barragan DI, Harada K, Bissonauth V, Charron J, Khavari PA.

  Developmental Cell 2007 Apr; 12(4):615.

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- Germline mutations in genes within the MAPK pathway cause cardio-facio-cutaneous syndrome.

  Rodriguez-Viciana P, Tetsu O, Tidyman WE, Estep AL, Conger BA, Cruz MS, McCormick F, Rauen KA.

  Science 2006 Mar; 311(5765):1287.

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

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- 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

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- Disease Models
- Edema
- Genetic Predisposition to Disease
- HIV Infections
- Kidney Failure
- Narcolepsy
- Ovarian Neoplasms
- Thyroid Neoplasms

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