

Rabbit anti-Human, Mouse MAPK1/3 Polyclonal Antibody | anti-MAPK1/3 antibody

MAPK1/3 (Ab-205/222) Antibody

CATALOG # AAA303700	HOST Rabbit	REACTIVITY Human, Mouse	APPLICATIONS Western Blot
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PRODUCT SYNONYMS

MAPK1/3; Polyclonal Antibody; MAPK1/3 (Ab-205/222) Antibody; ERK; ERK-2; ERK2; ERT1; Extracellular signal-regulated kinase 2; anti-MAPK1/3 antibody

PRODUCT SPECIFICATIONS

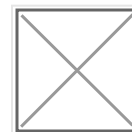
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Specificity	The antibody detects endogenous levels of total MAPK1/3 protein.
Purity/Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Form/Format	Rabbit IgG in phosphate buffered saline (without Mg ²⁺ and Ca ²⁺), pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1.0 mg/ml (varies by lot)
Sequence Length	360
Applicable Applications for anti-MAPK1/3 antibody	WB (Western Blot)
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from Internal of human MAPK1.
Target Name	MAPK1/3
Preparation and Storage	Store at -20 degree C

IMAGES



WB (Western Blot)

Western blot analysis of extracts from K562 cells (Lane 2), using MAPK1/3 (Ab-205/222) antibody. The lane on the left is treated with synthesized peptide.



WB (Western Blot)

Western blot analysis of extracts from NIH-3T3 cells, using MAPK1/3 (Ab-205/222) antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-MAPK1/3 antibody	<p>Serine/threonine kinase which acts as an essential component of the MAP kinase signal transduction pathway. MAPK1/ERK2 and MAPK3/ERK1 are the 2 MAPKs which play an important role in the MAPK/ERK cascade. They participate also in a signaling cascade initiated by activated KIT and KITLG/SCF. Depending on the cellular context, the MAPK/ERK cascade mediates diverse biological functions such as cell growth, adhesion, survival and differentiation through the regulation of transcription, translation, cytoskeletal rearrangements. The MAPK/ERK cascade plays also a role in initiation and regulation of meiosis, mitosis, and postmitotic functions in differentiated cells by phosphorylating a number of transcription factors. About 160 substrates have already been discovered for ERKs. Many of these substrates are localized in the nucleus, and seem to participate in the regulation of transcription upon stimulation. However, other substrates are found in the cytosol as well as in other cellular organelles, and those are responsible for processes such as translation, mitosis and apoptosis. Moreover, the MAPK/ERK cascade is also involved in the regulation of the endosomal dynamics, including lysosome processing and endosome cycling through the perinuclear recycling compartment (PNRC); as well as in the fragmentation of the Golgi apparatus during mitosis. The substrates include transcription factors (such as ATF2, BCL6, ELK1, ERF, FOS, HSF4 or SPZ1), cytoskeletal elements (such as CANX, CTTN, GJA1, MAP2, MAPT, PXN, SORBS3 or STMN1), regulators of apoptosis (such as BAD, BTG2, CASP9, DAPK1, IER3, MCL1 or PPARG), regulators of translation (such as EIF4EBP1) and a variety of other signaling-related molecules (like ARHGEF2, DCC, FRS2 or GRB10). Protein kinases (such as RAF1, RPS6KA1/RSK1, RPS6KA3/RSK2, RPS6KA2/RSK3, RPS6KA6/RSK4, SYK, MKNK1/MNK1, MKNK2/MNK2, RPS6KA5/MSK1, RPS6KA4/MSK2, MAPKAPK3 or MAPKAPK5) and phosphatases (such as DUSP1, DUSP4, DUSP6 or DUSP16) are other substrates which enable the propagation the MAPK/ERK signal to additional cytosolic and nuclear targets, thereby extending the specificity of the cascade. Mediates phosphorylation of TPR in respons to EGF stimulation. May play a role in the spindle assembly checkpoint. Phosphorylates PML and promotes its interaction with PIN1, leading to PML degradation. Acts as a transcriptional repressor. Binds to a [GC]AAA[GC] consensus sequence. Repress the expression of interferon gamma-induced genes. Seems to bind to the promoter of CCL5, DMP1, IFIH1, IFITM1, IRF7, IRF9, LAMP3, OAS1, OAS2, OAS3 and STAT1. Transcriptional activity is independent of kinase activity.</p>
Product Categories/Family for anti-MAPK1/3 antibody	Total protein Ab

NCBI AND UNIPROT INFORMATION

NCBI GI #	66932916
NCBI GeneID	5594
NCBI Accession #	NP_002736.3
NCBI GenBank Nucleotide #	NM_002745.4
UniProt Accession #	P28482; A8CZ64
Molecular Weight	36,432 Da
NCBI Official Full Name	mitogen-activated protein kinase 1
NCBI Official Synonym Full Names	mitogen-activated protein kinase 1
NCBI Official Symbol	MAPK1
NCBI Official Synonym Symbols	ERK; p38; p40; p41; ERK2; ERT1; ERK-2; MAPK2; PRKM1; PRKM2; P42MAPK; p41mapk; p42-MAPK
NCBI Protein Information	mitogen-activated protein kinase 1
UniProt Protein Name	Mitogen-activated protein kinase 1
UniProt Gene Name	MAPK1
UniProt Synonym Gene Names	ERK2; PRKM1; PRKM2; MAP kinase 1; MAPK 1; ERK-2; p42-MAPK; MAP kinase 2; MAPK 2
UniProt Entry Name	MK01_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

