

Rabbit ERK1/2 Polyclonal Antibody | anti-ERK1/2 antibody

ERK1/2 Antibody

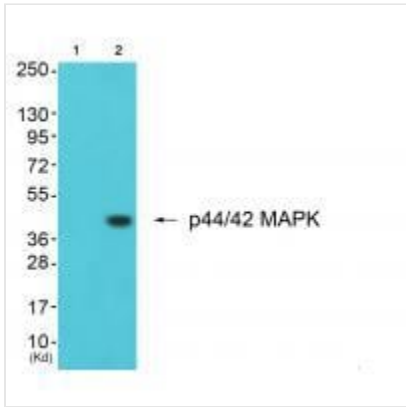
CATALOG # AAA306590	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

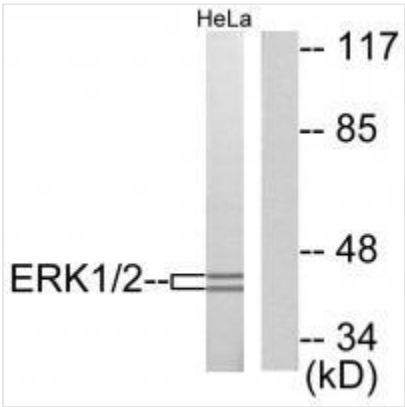
ERK1/2; Polyclonal Antibody; ERK1/2 Antibody; EC 2.7.11.24; Extracellular signal-regulated kinase 1; ERK-1; Insulin-stimulated MAP2 kinase; MAP kinase 1; anti-ERK1/2 antibody

PRODUCT SPECIFICATIONS

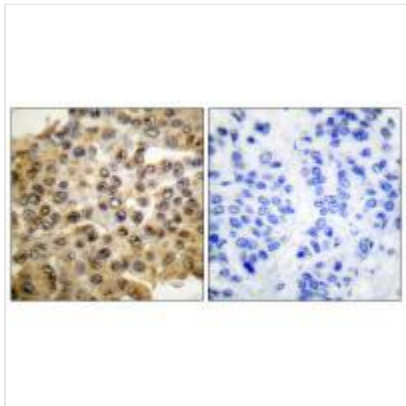
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Specificity	The antibody detects endogenous levels of total ERK1/2 protein.
Purity/Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Form/Format	Rabbit IgG in 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	357
Applicable Applications for anti-ERK1/2 antibody	IHC (Immunohistochemistry), WB (Western Blot)
Immunogen Type	Peptide
Immunogen Description	Synthesized peptide derived from human ERK1/2.
Target Name	ERK1/2
Preparation and Storage	Store at -20 degree C



WB (Western Blot)
Western blot analysis of extracts from K562 cells (Lane 2), using p44/42 MAPK antibody. The lane on the left is treated with synthesized peptide.



WB (Western Blot)
Western blot analysis of extracts from HeLa cells, using ERK1/2 antibody.



IHC (Immunohistochemistry)
Immunohistochemical analysis of paraffin-embedded human breast carcinoma tissue, using ERK1/2 antibody.

ADDITIONAL INFORMATION

Related Product Information for anti-ERK1/2 antibody

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, 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. Charleen T. Chu, Eur. J. Biochem., Jun 2004; 271: 2060 - 2066. Youwei Jiang, PNAS, Aug 2001; 98: 10102. Yu Zhao, J. Physiol., Sep 2003; 551: 691 - 703. Georges Daoud, J. Physiol., Jul 2005; 566: 409 - 423.

NCBI AND UNIPROT INFORMATION

NCBI GI #	91718897
NCBI GeneID	5595
NCBI Accession #	NP_001035145.1
NCBI GenBank Nucleotide #	NM_001040056.2
UniProt Accession #	P27361; Q8NHX1; A8CZ58; B0LPG3
Molecular Weight	40,088 Da
NCBI Official Full Name	mitogen-activated protein kinase 3 isoform 2
NCBI Official Synonym Full Names	mitogen-activated protein kinase 3
NCBI Official Symbol	MAPK3
NCBI Official Synonym Symbols	ERK1; ERT2; ERK-1; PRKM3; P44ERK1; P44MAPK; HS44KDAP; HUMKER1A; p44-ERK1; p44-MAPK
NCBI Protein Information	mitogen-activated protein kinase 3
UniProt Protein Name	Mitogen-activated protein kinase 3
UniProt Gene Name	MAPK3
UniProt Synonym Gene Names	ERK1; PRKM3; MAP kinase 3; MAPK 3; ERK-1; p44-MAPK
UniProt Entry Name	MK03_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.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/erk1-2-antibody-immunohistochemistry-western-blot-elisa/306590>