

Rabbit anti-Human MAP Kinase p44/42 Monoclonal Antibody | anti-MAPK3/MAPK1 antibody

MAP Kinase p44/42, phosphorylated (Thr202/Tyr204) (MAPK3/MAPK1) antibody

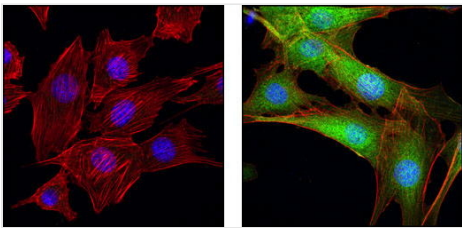
CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA14743	Rabbit	Human	Immunofluorescence, Flow Cytometry, Functional Assay, Western Blot, Immunoprecipitation, Immunohistochemistry

PRODUCT SYNONYMS

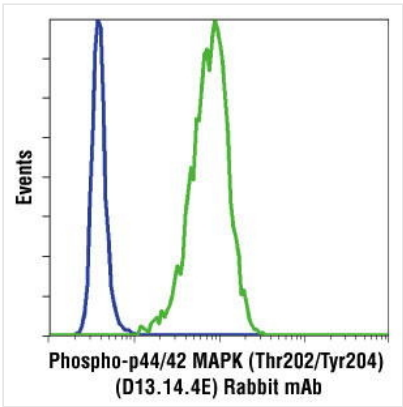
MAP Kinase p44/42; Monoclonal Antibody; phosphorylated (Thr202/Tyr204) (MAPK3/MAPK1) antibody; MAPK3/MAPK1; Mitogen-activated Protein Kinase 1; MAP Kinase 1; MAPK 1; ERT1; Extracellular Signal-regulated Kinase 2; ERK-2; MAP Kinase Isoform p42; p42-MAPK; Mitogen-activated Protein Kinase 2; anti-MAPK3/MAPK1 antibody

PRODUCT SPECIFICATIONS

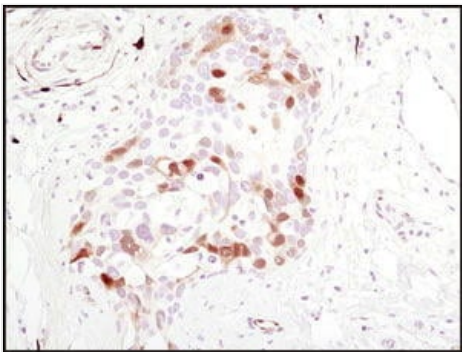
Host	Rabbit
Reactivity	Human
Clonality	Monoclonal
Isotype	IgG
Clone Number	8A17
Specificity	Recognizes endogenous levels of p42 and p44 MAP Kinase (Erk1 and Erk2) when dually phosphorylated at Thr202 and Tyr204 of Erk1 (Thr185 and Tyr187 of Erk2), and singly phosphorylated at Thr202. This antibody does not crossreact with the corresponding phosphorylated residues of either JNK/SAPK or p38 MAP kinases. Species crossreactivity: mouse, rat, monkey, pig, hamster, bovine, dog, drosophila, c. elegans, zebrafish.
Form/Format	Supplied as a liquid in 10mM sodium HEPES (pH 7.5), 150mM NaCl, 100ug/ml BSA and 50% glycerol.
Applicable Applications for anti-MAPK3/MAPK1 antibody	IF (Immunofluorescence), FCM/FACS (Flow Cytometry), WB (Western Blot), IP (Immunoprecipitation), IHC (Immunohistochemistry)
Application Notes	Immunofluorescence: 1:200; Flow Cytometry: 1:100; Western Blot: 1:2000; Immunohistochemistry: 1:200; Immunoprecipitation: 1:50
Immunogen	Synthetic phosphopeptide (KLH-coupled) corresponding to residues surrounding Thr202/Tyr204 of human p44 MAP kinase.
Preparation and Storage	May be stored at 4 degree C for short-term only. For long-term storage, aliquot and store at -20 degree C. Aliquots are stable for at least 6 months at -20 degree C. For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.



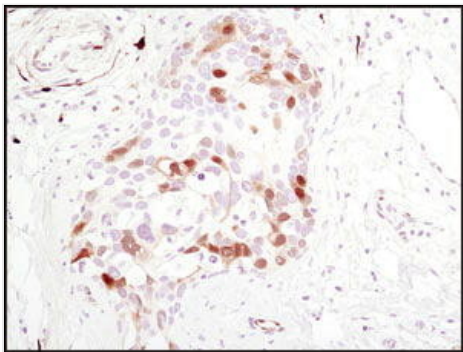
IF (Immunofluorescence)
Confocal immunofluorescent analysis of C2C12 cells, U0126-treated (left, M2865-5010 μM for 1 h) or TPA-treated (right, #T5600-03 200 nM for 15 min), using AAA14743 (green) Actin filaments have been labeled with Alexa Fluor® 555 phalloidin (red). Blue pseudocolor = DRAQ5™ (fluorescent DNA dye).



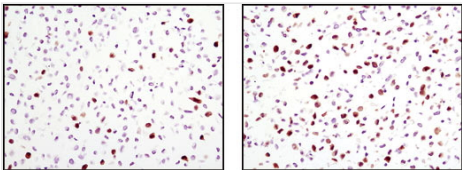
FCM (Flow Cytometry)
Flow cytometric analysis of Jurkat cells, U0126-treated (blue) or PMA-treated (green), using AAA14743



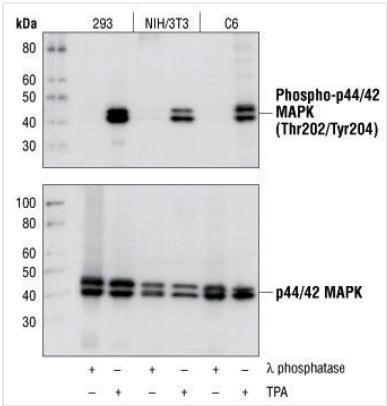
IHC (Immunohistochemistry)
Immunohistochemical analysis of paraffin-embedded human lung carcinoma, untreated (left) or λ phosphatase-treated (right), using AAA14743



IHC (Immunohistochemistry)
Immunohistochemical analysis of paraffin-embedded human breast carcinoma using AAA14743



IHC (Immunohistochemistry)
Immunohistochemical analysis of paraffin-embedded NIH/3T3 cells, untreated (left) or PMA-treated (right), using AAA14743



WB (Western Blot)
Western blot analysis of extracts from 293, NIH/3T3 and C6 cells, treated with λ phosphatase or TPA as indicated, using AAA14743 (upper), or M2360-02 (lower).

ADDITIONAL INFORMATION

Related Product Information for anti-MAPK3/MAPK1 antibody	Mitogen-activated protein kinases (MAPKs) are a widely conserved family of serine/threonine protein kinases involved in many cellular programs such as cell proliferation, differentiation, motility, and death. The p44/42 MAPK (ERK1/2) signaling pathway can be activated in response to a diverse range of extracellular stimuli including mitogens, growth factors, and cytokines (1-3) and is an important target in the identification and treatment of cancer (4). Upon stimulation, a sequential three-part protein kinase cascade is initiated, consisting of a MAP kinase kinase kinase (MAPKKK), a MAP kinase kinase (MAPKK), and a MAP kinase. While multiple ERK1/2 MAP3Ks have been identified, including the Raf family, Mos, and Tpl2/Cot, MEK1 and MEK2 are the primary MAPKKs in this pathway (5,6). MEK1 and MEK2 activate ERK1/p44 and ERK2/p42 through phosphorylation of activation loop residues Thr202/ Tyr204 and Thr185/Tyr187, respectively. Several downstream targets of ERK1/2 have been identified, including p90RSK (7) and the transcription factor Elk-1 (8,9). ERK1/2 are negatively regulated by a family of dual-specificity (Thr/ Tyr) MAPK phosphatases, known as DUSPs or MKPs (10), along with MEK inhibitors such as U0126 and PD98059.
Product Categories/Family for anti-MAPK3/MAPK1 antibody	Molecular Biology; MB-Protein Kinases

NCBI AND UNIPROT INFORMATION

NCBI GI #	45383812
NCBI GeneID	373953
NCBI Accession #	NP_989481.1
NCBI GenBank Nucleotide #	NM_204150.1
NCBI Official Full Name	mitogen-activated protein kinase 1
NCBI Official Synonym Full Names	mitogen-activated protein kinase 1
NCBI Official Symbol	MAPK1
NCBI Protein Information	mitogen-activated protein kinase 1

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/monoclonal/map-kinase-p44-42-antibody-clone-8a17-immunofluorescence-flow-cytometry-western-blot-immunoprecipitation-immunohistochemistry-elisa/14743>