

Rabbit MAPK7 Polyclonal Antibody | anti-MAPK7 antibody

MAPK7 Antibody (C-term)

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA289435	Rabbit	Human (Predicted Reactivity: Bovine, Mouse, Rat)	Immunohistochemistry, ELISA, Western Blot

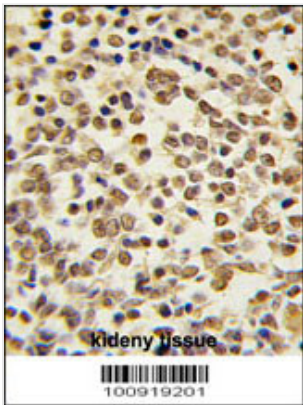
PRODUCT SYNONYMS

MAPK7; Polyclonal Antibody; MAPK7 Antibody (C-term); Mitogen-activated protein kinase 7; MAP kinase 7; MAPK 7; Big MAP kinase 1; BMK-1; Extracellular signal-regulated kinase 5; ERK-5; BMK1; ERK5; PRKM7; anti-MAPK7 antibody

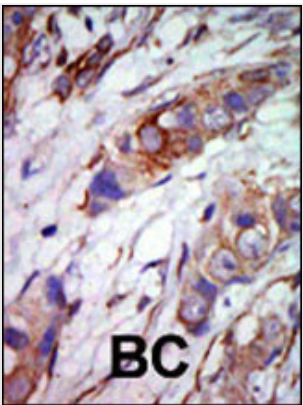
PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human (Predicted Reactivity: Bovine, Mouse, Rat)
Clonality	Polyclonal
Isotype	Rabbit Ig
Specificity	This MAPK7 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 776-805 amino acids from the C-terminal region of human MAPK7.
Purity/Purification	Purified Rabbit Polyclonal Antibody (Pab)
Form/Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
Sequence Positions	776-805
Sequence Length	451
Applicable Applications for anti-MAPK7 antibody	IHC (Immunohistochemistry), ELISA, WB (Western Blot)
Function	Plays a role in various cellular processes such as proliferation, differentiation and cell survival. The upstream activator of MAPK7 is the MAPK kinase MAP2K5. Upon activation, it translocates to the nucleus and phosphorylates various downstream targets including MEF2C. EGF activates MAPK7 through a Ras- independent and MAP2K5- dependent pathway. May have a role in muscle cell differentiation. May be important for endothelial function and maintenance of blood vessel integrity. MAP2K5 and MAPK7 interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways. Phosphorylates SGK1 at Ser-78 and this is required for growth factor-induced cell cycle progression. Involved in the regulation of p53/TP53 by disrupting the PML-MDM2 interaction.
Cellular location	Cytoplasm. Nucleus. Nucleus, PML body. Note=Translocates to the nucleus upon activation
Tissue location	Expressed in many adult tissues. Abundant in heart, placenta, lung, kidney and skeletal muscle. Not detectable in liver.
Preparation and Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

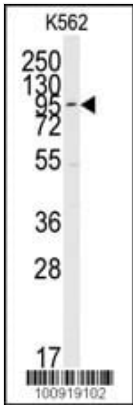
IMAGES



IHC (Immunohistochemisry)
Formalin-fixed and paraffin-embedded human kidney carcinoma tissue reacted with ERK5 Antibody (C-term) , which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



IHC (Immunohiostchemistry)
Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.



WB (Western Blot)
Western blot analysis of anti-ERK5 C-term Pab in K562 cell line lysates (35ug/lane). ERK5 (arrow) was detected using the purified Pab.

ADDITIONAL INFORMATION

Related Product Information for anti-MAPK7 antibody	MEK5 and ERK5, a member of the MAP kinase subfamily of the Ser/Thr protein kinases, interact specifically with one another and not with MEK1/ERK1 or MEK2/ERK2 pathways. ERK5 is activated by tyrosine and threonine phosphorylation It is expressed in many adult tissues, abundantly in heart, placenta, lung, kidney and skeletal muscle, but is not detectable in liver. The second proline-rich region may interact with actin targeting the kinase to a specific location in the cell. ERK5 is autophosphorylated on threonine and tyrosine residues when the C-terminal part of the kinase, which could have a regulatory role, is absent.
Product Categories/Family for anti-MAPK7 antibody	Neuroscience; Signal Transduction
References	Zhou, G., et al., J. Biol. Chem. 270(21):12665-12669 (1995). Lee, J.D., et al., Biochem. Biophys. Res. Commun. 213(2):715-724 (1995).

NCBI AND UNIPROT INFORMATION

NCBI GI #	20986497
NCBI GeneID	5598
NCBI Accession #	NP_002740.2 ; NP_620601.1 ; NP_620602.2 ; NP_620603.2
NCBI GenBank Nucleotide #	NM_002749.3

UniProt Accession #	Q13164; Q16634; Q59F50; Q6QLU7; Q7L4P4; Q969G1; Q96G51
Molecular Weight	88386
NCBI Official Full Name	mitogen-activated protein kinase 7 isoform 1
NCBI Official Synonym Full Names	mitogen-activated protein kinase 7
NCBI Official Symbol	MAPK7
NCBI Official Synonym Symbols	BMK1; ERK4; ERK5; PRKM7
NCBI Protein Information	mitogen-activated protein kinase 7
UniProt Protein Name	Mitogen-activated protein kinase 7
UniProt Gene Name	MAPK7
UniProt Synonym Gene Names	BMK1; ERK5; PRKM7; MAP kinase 7; MAPK 7; BMK-1; ERK-5
UniProt Entry Name	MK07_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.

AAA Biotech | Tel: +1 (619) 604-9440 | Fax: +1 (619) 604-9441 | contact@aaabiotech.com
Online datasheet: <https://stage.aaabiotech.com/polyclonal/mapk7-antibody-immunohistochemistry-western-blot-elisa/289435>