

Rabbit MEK5/MAP2K5 Polyclonal Antibody | anti-MAP2K5 antibody

Anti-MEK5/MAP2K5 Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA125708	Rabbit	Human, Monkey, Rat	ELISA, Flow Cytometry, Functional Assay, Immunofluorescence, Immunocytochemistry, Immunohistochemistry, Western Blot

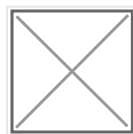
PRODUCT SYNONYMS

MEK5/MAP2K5; Polyclonal Antibody; Anti-MEK5/MAP2K5 Antibody; MAP2K5; MEK5; MKK5; PRKMK; Dual specificity mitogen-activated protein kinase kinase 5; MAP kinase kinase 5; MAPKK 5; MAPK/ERK kinase 5; MEK 5; mitogen-activated protein kinase kinase 5; anti-MAP2K5 antibody

PRODUCT SPECIFICATIONS

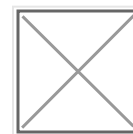
Host	Rabbit
Reactivity	Human, Monkey, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Rabbit IgG polyclonal antibody for MEK5/MAP2K5 detection.
Purity/Purification	Immunogen affinity purified.
Form/Format	Lyophilized. Each vial contains 4mg Trehalose, 0.9mg NaCl and 0.2mg Na ₂ HPO ₄ .
Applicable Applications for anti-MAP2K5 antibody	ELISA (Direct ELISA), FCM/FACS (Flow Cytometry), IF (Immunofluorescence), ICC (Immunocytochemistry), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	E Coli-derived human MEK5/MAP2K5 recombinant protein (Position: F9-R442).
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.
Recommended Detection Systems	Recommended Detection Systems
Preparation and Storage	Store at -20 degree C for one year. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for a longer time. Avoid repeated freezing and thawing.

IMAGES



FCM/FACS (Flow Cytometry)

Figure 4. Flow Cytometry analysis of 293T cells using anti-MEK5/MAP2K5 antibody (AAA125708). Overlay histogram showing 293T cells stained with AAA125708 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-MEK5/MAP2K5 Antibody (AAA125708, 1μg/1x10⁶ cells) for 30 min at 20 degree C. DyLight[®]488 conjugated goat anti-rabbit IgG (5-10μg/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1μg/1x10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.



IF (Immunofluorescence)

Figure 3. IF analysis of MEK5/MAP2K5 using anti-MEK5/MAP2K5 antibody (AAA125708). MEK5/MAP2K5 was detected in immunocytochemical section of T47D cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5μg/mL rabbit anti-MEK5/MAP2K5 Antibody (AAA125708) overnight at 4 degree C. DyLight[®]488 Conjugated Goat Anti-Rabbit IgG was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37 degree C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



IHC (Immunohistochemistry)

Figure 2. IHC analysis of MEK5/MAP2K5 using anti-MEK5/MAP2K5 antibody (AAA125708). MEK5/MAP2K5 was detected in paraffin-embedded section of human skeletal muscle tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 µg/ml rabbit anti-MEK5/MAP2K5 Antibody (AAA125708) overnight at 4 degree C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) with DAB as the chromogen.



WB (Western Blot)

Figure 1. Western blot analysis of MEK5/MAP2K5 using anti-MEK5/MAP2K5 antibody (AAA125708). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 µg of sample under reducing conditions. Lane 1: human HEK293 whole cell lysates Lane 2: human A549 whole cell lysates Lane 3: human K562 whole cell lysates Lane 4: human A549 whole cell lysates Lane 5: human Hela whole cell lysates Lane 6: human PC-3 whole cell lysates Lane 7: human SW620 whole cell lysates Lane 8: monkey COS-7 whole cell lysates Lane 9: rat testis tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-MEK5/MAP2K5 antigen affinity purified polyclonal antibody (Catalog # AAA125708) at 0.5 µg/mL overnight at 4 degree C, then washed with TBS-0.1% Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit with Tanon 5200 system. A specific band was detected for MEK5/MAP2K5 at approximately 50KD. The expected band size for MEK5/MAP2K5 is at 50KD.

ADDITIONAL INFORMATION

Related Product Information for anti-MAP2K5 antibody	Dual specificity mitogen-activated protein kinase kinase 5 is an enzyme that in humans is encoded by the MAP2K5 gene. The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase specifically interacts with and activates MAPK7/ERK5. This kinase itself can be phosphorylated and activated by MAP3K3/MEKK3, as well as by atypical protein kinase C isoforms (aPKCs). The signal cascade mediated by this kinase is involved in growth factor stimulated cell proliferation and muscle cell differentiation. Three alternatively spliced transcript variants of this gene encoding distinct isoforms have been described.
References	1. Zhou, G., Bao, Z. Q., Dixon, J. E. Components of a new human protein kinase signal transduction pathway. J. Biol. Chem. 270: 12665-12669, 1995.

NCBI AND UNIPROT INFORMATION

NCBI GI #	332164798
NCBI GeneID	5607
NCBI Accession #	NP_001193733.1
NCBI GenBank Nucleotide #	NM_001206804.1
UniProt Accession #	Q13163; Q92961; Q92962; B4DE43
Molecular Weight	50112 MW
NCBI Official Full Name	dual specificity mitogen-activated protein kinase kinase 5 isoform C
NCBI Official Synonym Full Names	mitogen-activated protein kinase kinase 5
NCBI Official Symbol	MAP2K5
NCBI Official Synonym Symbols	MEK5; MAPKK5; PRKMK5; HsT17454
NCBI Protein Information	dual specificity mitogen-activated protein kinase kinase 5
UniProt Protein Name	Dual specificity mitogen-activated protein kinase kinase 5
UniProt Gene Name	MAP2K5
UniProt Synonym Gene Names	MEK5; MKK5; PRKMK5; MAP kinase kinase 5; MAPKK 5; MEK 5

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.

