
Product Name: KD-Validated MAP2K3 Recombinant Rabbit Monoclonal Antibody
Catalog #: KVA01677

For research use only.

Summary

Description	KO&KD-Validated antibody
Host	Rabbit
Application	WB,FCM,ICC,IHC-P
Reactivity	Human,Mouse,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	Rabbit IgG
Clonality	Rabbit mAb
Form	Liquid
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:1,000-1:5,000; FC 1:200-1:2,000; ICC 1:100-1:1,000; IHC-P 1:100-1:200
Molecular Weight	Calculated MW: 39.3kDa

Antigen Information

Gene Name	MAP2K3
Alternative Names	MAP2K3; Mitogen-Activated Protein Kinase Kinase 3; MEK3; MKK3; Stress-Activated Protein Kinase Kinase 2; MAP Kinase Kinase 3; MAPK/ERK Kinase 3; MAPKK3; SAPKK2; PRKMK3; Dual Specificity Mitogen-Activated Protein Kinase Kinase 3; SAPK Kinase 2; EC 2.7.12.2; SAPKK-2; MAPKK 3; MEK 3; Dual Specificity Mitogen Activated Protein Kinase Kinase 3; SKK2
Gene ID	5606.0
SwissProt ID	P46734
Immunogen	A synthesized peptide derived from human MEK3

Background

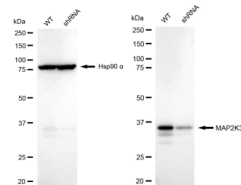
The protein encoded by this gene is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is

activated by mitogenic and environmental stress, and participates in the MAP kinase-mediated signaling cascade. It phosphorylates and thus activates MAPK14/p38-MAPK. This kinase can be activated by insulin, and is necessary for the expression of glucose transporter. Expression of RAS oncogene is found to result in the accumulation of the active form of this kinase, which thus leads to the constitutive activation of MAPK14, and confers oncogenic transformation of primary cells. The inhibition of this kinase is involved in the pathogenesis of Yersinia pseudotuberculosis. Multiple alternatively spliced transcript variants that encode distinct isoforms have been reported for this gene. [provided by RefSeq, Jul 2008]

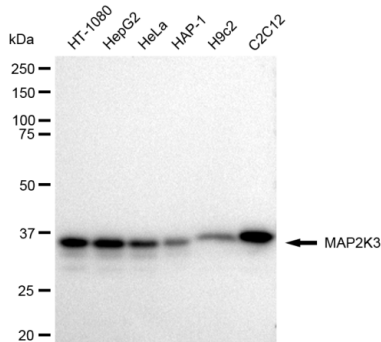
Research Area

Signal Transduction, Epigenetics and Nuclear Signaling, Cancer, Immunology

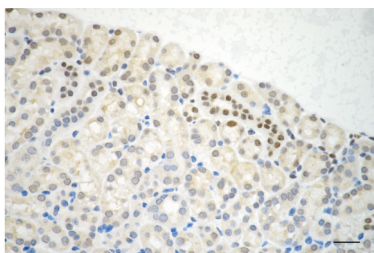
Image Data



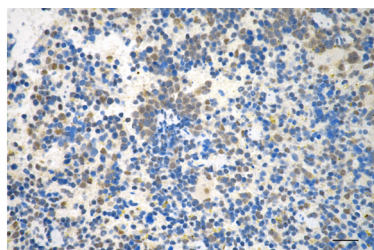
Western blotting analysis using MAP2K3 antibody (KVA01677). MAP2K3 expression in wild type (WT) and MAP2K3 shRNA knockdown (KD) HeLa cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with MAP2K3 antibody (KVA01677, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



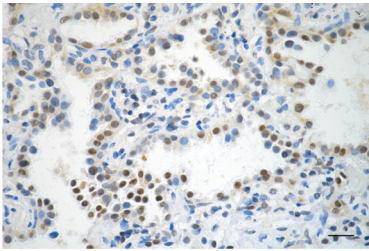
Western blotting analysis using MAP2K3 antibody (KVA01677). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with MAP2K3 antibody (KVA01677, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



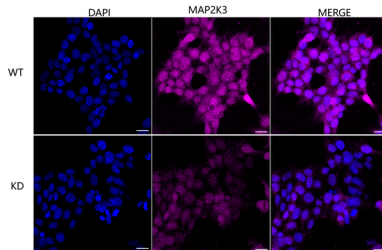
Immunohistochemistry was performed on paraffin-embedded mouse kidney using MAP2K3 antibody (KVA01677, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



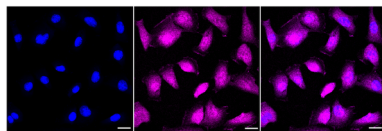
Immunohistochemistry was performed on paraffin-embedded mouse spleen using MAP2K3 antibody (KVA01677, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



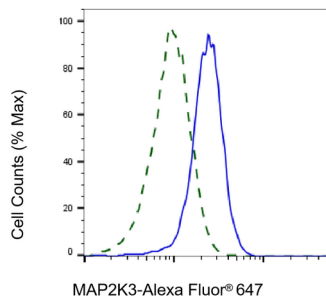
Immunohistochemistry was performed on paraffin-embedded mouse liver using MAP2K3 antibody (KVA01677, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



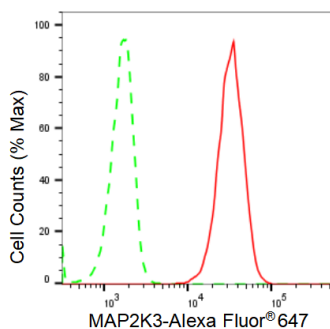
Immunocytochemical staining of HeLa cells using MAP2K3 antibody (KVA01677, 1:1,000), Top panel: wild-type (WT); Bottom panel: MAP2K3 shRNA knockdown (KD). Nuclei were stained blue with DAPI; MAP2K3 was stained magenta with Alexa Fluor® 647. Scale bar, 20 µm.



Immunocytochemical staining of C2C12 cells with MAP2K3 antibody (KVA01677, 1:1,000). Nuclei were stained blue with DAPI; MAP2K3 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: 20 µm.



Validation of MAP2K3 knockdown using flow cytometry. Wild-type(WT, Blue) and knockdown(KD, Green) HeLa cells were stained with MAP2K3 antibody (KVA01677, 1:2,000) and analyzed using BD flow cytometer.



Flow cytometric analysis of MAP2K3 expression in C2C12 cells using MAP2K3 antibody (KVA01677, 1:2,000). Green, isotype control; red, MAP2K3.