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MEK2 (MAP2K2) Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7961c

Specification

MEK2 (MAP2K2) Antibody (Center) - Product Information

Application	**IF, WB, IHC-P,E**
Primary Accession	P36507
Reactivity	**Human, Mouse**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**44424**
Antigen Region	**262-292**

MEK2 (MAP2K2) Antibody (Center) - Additional Information

Gene ID 5605

Other Names
Dual specificity mitogen-activated protein kinase kinase 2, MAP kinase kinase 2, MAPKK 2, ERK activator kinase 2, MAPK/ERK kinase 2, MEK 2, MAP2K2, MEK2, MKK2, PRKMK2

Target/Specificity
This MEK2 (MAP2K2) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 262-292 amino acids from the Central region of human MEK2 (MAP2K2).

Dilution
IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.

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.

Precautions
MEK2 (MAP2K2) Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

MEK2 (MAP2K2) Antibody (Center) - Protein Information

Name MAP2K2

Synonyms MEK2, MKK2, PRKMK2

Function Catalyzes the concomitant phosphorylation of a threonine and a tyrosine residue in a Thr-Glu-Tyr sequence located in MAP kinases. Activates the ERK1 and ERK2 MAP kinases (By similarity). Activates BRAF in a KSR1 or KSR2-dependent manner; by binding to KSR1 or KSR2 releases the inhibitory intramolecular interaction between KSR1 or KSR2 protein kinase and N-terminal domains which promotes KSR1 or KSR2-BRAF dimerization and BRAF activation (PubMed:29433126).

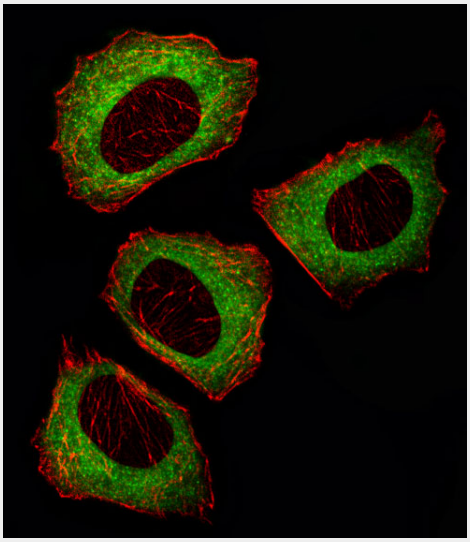
Cellular Location
Cytoplasm. Membrane; Peripheral membrane protein. Note=Membrane localization is probably regulated by its interaction with KSR1.

MEK2 (MAP2K2) Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

MEK2 (MAP2K2) Antibody (Center) - Images



Fluorescent image of U251 cell stained with MEK2 (MAP2K2) Antibody (Center)(Cat#AP7961c/SA110819AW).U251 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with MEK2 primary antibody (1:25, 1 h at 37℃). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37℃).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37℃). MEK2 immunoreactivity is localized to Cytoplasm significantly.

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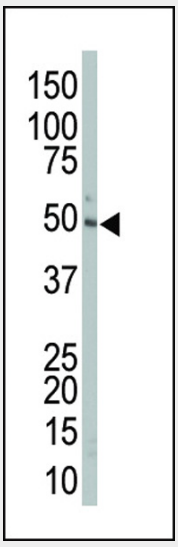
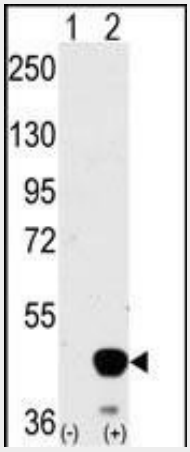
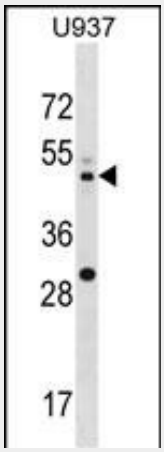


The anti-MAP2K2 Pab (Cat. #AP7961c) is used in Western blot to detect MAP2K2 in mouse liver tissue lysate.



Western blot analysis of MAP2K2 (arrow) using MAP2K2 Antibody (Center) (Cat.#AP7961c).293 cell lysates (2 ug/lane) either nontransfected (Lane 1) or transiently transfected with the MAP2K2 gene (Lane 2) (Origene Technologies).



MAP2K2 Antibody (A278) (Cat. #AP7961c) western blot analysis in U937 cell line lysates (35ug/lane).This demonstrates the MAP2K2 antibody detected the MAP2K2 protein (arrow).

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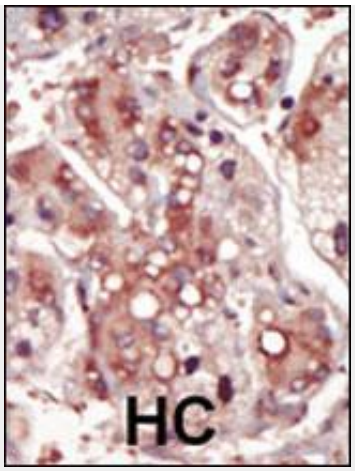

Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast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

MEK2 (MAP2K2) Antibody (Center) - Background

MAP2K2 is a dual specificity protein kinase that belongs to the MAP kinase kinase family. This kinase is known to play a critical role in mitogen growth factor signal transduction. It phosphorylates and thus activates MAPK1/ERK2 and MAPK2/ERK3. The activation of this kinase itself is dependent on the Ser/Thr phosphorylation by MAP kinase kinase kinases. The inhibition or degradation of this kinase is found to be involved in the pathogenesis of Yersinia and anthrax.

MEK2 (MAP2K2) Antibody (Center) - References

Burroughs, K.D., et al., Mol. Cancer Res. 1(4):312-322 (2003).
Tran, H., et al., Mol. Cell. Biol. 23(20):7177-7188 (2003).
Li, S.P., et al., Cancer Res. 63(13):3473-3477 (2003).
Li, Y., et al., J. Biol. Chem. 278(16):13663-13671 (2003).
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