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MEK1 Monoclonal Antibody (1C1)

Catalog Number **MA1-095**

Product data sheet

Details	
Size	100 µg
Host/Isotope	Mouse / IgG
Class	Monoclonal
Type	Antibody
Clone	1C1
Immunogen	Protein expressed in 293T cell transfected with human MAP2K1 expression vector
Conjugate	Unconjugated
Form	Liquid
Concentration	1 mg/mL
Purification	Protein A
Storage buffer	PBS with 1mg/mL BSA, 30% glycerol
Contains	0.05% sodium azide
Storage Conditions	-20°C

Species Reactivity	
Species reactivity	Human, Mouse

Tested Applications	Dilution *
Flow Cytometry (Flow)	5-20 µg/mL
Immunohistochemistry (Paraffin) (IHC (P))	1:10,000-1:100,000
Immunocytochemistry (ICC/IF)	1:200

* Suggested working dilutions are given as a guide only. It is recommended that the user titrate the product for use in their own experiment using appropriate negative and positive controls.

Background/Target Information

MAP2K1 (MEK1) kinase is a dual-specificity protein kinase that functions in mitogen-activated protein kinase (MAPK) cascades, controlling cell growth and differentiation. MAP2K1 is activated by a wide variety of growth factors and cytokines and also by membrane-dependent depolarization and calcium influx. Mek1 is activated by phosphorylation of serine 218 and 222 residues by Raf1. It is known to be involved in the signaling during stress activate response, apoptosis and proliferative induction by cytokines. Mutations in the gene can lead to cardiofaciocutaneous syndrome.

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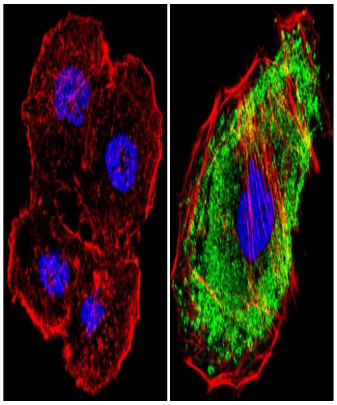
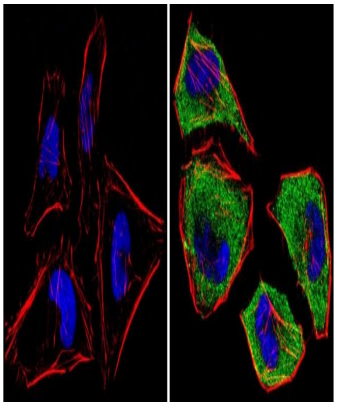
Product Images For MEK1 Monoclonal Antibody (1C1)



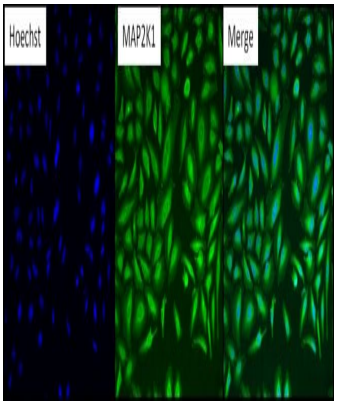
MEK1 Antibody (MA1-095) in ICC/IF

Immunofluorescent analysis of MAP2K1 (green) showing positive staining in the cytoplasm of A431 cells (right) compared with a negative control in the absence of primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature and probed with a MAP2K1 monoclonal antibody (Product # MA1-095) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 488-conjugated goat-anti-mouse IgG (H+L) secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with DAPI for 5-10 minutes in the dark. Images were taken at a magnification of 60x.



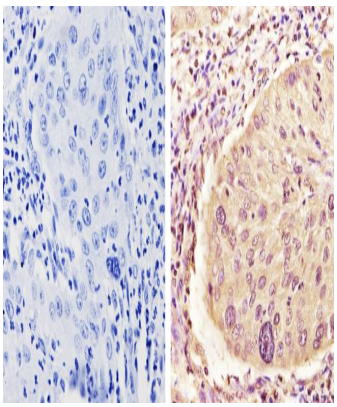
MEK1 Antibody (MA1-095) in ICC/IF

Immunofluorescent analysis of MAP2K1 (green) showing positive staining in the cytoplasm of Hela cells (right) compared with a negative control in the absence of primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature and probed with a MAP2K1 monoclonal antibody (Product # MA1-095) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 488-conjugated goat-anti-mouse IgG (H+L) secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with DAPI for 5-10 minutes in the dark. Images were taken at a magnification of 60x.



MEK1 Antibody (MA1-095) in ICC/IF

Immunofluorescent analysis of MAP2K1 (green) in HeLa cells. Formalin fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 10 minutes at room temperature. Cells were then blocked with 5% normal goat serum (Product # 31873) for 15 minutes at room temperature. Cells were then probed with a mouse monoclonal antibody recognizing MAP2K1 (Product # MA1-095), at a dilution of 1:200 for at least 1 hour at room temperature. Cells were then washed with PBS and incubated with DyLight 488 goat-anti-mouse secondary antibody at a dilution of 1:400 for 30 minutes at room temperature. Nuclei (blue) were stained with Hoechst 33342 dye (Product # 62249). Images were taken on a Thermo Scientific ArrayScan at 10X magnification.



MEK1 Antibody (MA1-095) in IHC (P)

Immunohistochemistry analysis of MAP2K1 showing staining in the nucleus and cytoplasm of paraffin-treated human cervical carcinoma (right) compared with a negative control in the absence of primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a MAP2K1 monoclonal antibody (Product # MA1-095) diluted by 3% BSA-PBS at a dilution of 1:20,000 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.

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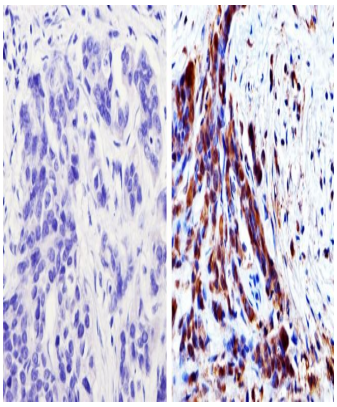
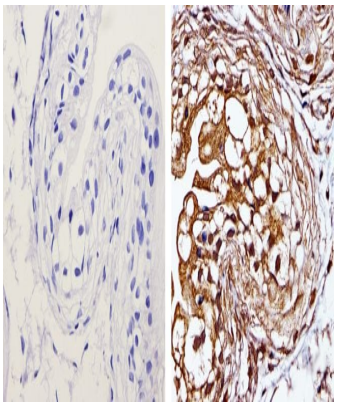


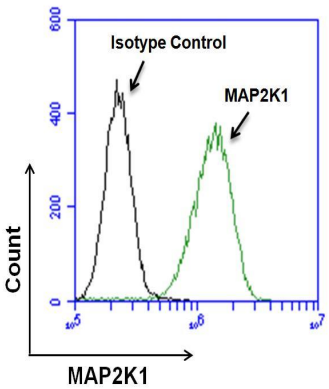
MEK1 Antibody (MA1-095) in IHC (P)

Immunohistochemistry analysis of MAP2K1 showing staining in the nucleus and cytoplasm of paraffin-treated human bladder carcinoma (right) compared with a negative control in the absence of primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a MAP2K1 monoclonal antibody (Product # MA1-095) diluted by 3% BSA-PBS at a dilution of 1:20,000 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



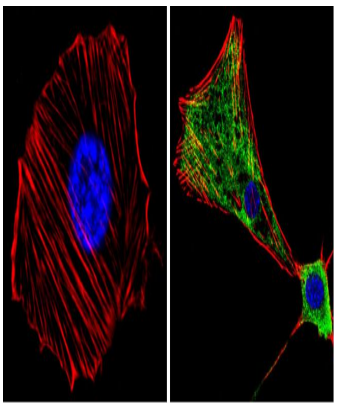
MEK1 Antibody (MA1-095) in IHC (P)

Immunohistochemistry analysis of MAP2K1 showing staining in the nucleus and cytoplasm of paraffin-treated mouse bladder tissue (right) compared with a negative control in the absence of primary antibody (left). To expose target proteins, antigen retrieval was performed using 10mM sodium citrate (pH 6.0), microwaved for 8-15 min. Following antigen retrieval, tissues were blocked in 3% H2O2-methanol for 15 min at room temperature, washed with ddH2O and PBS, and then probed with a MAP2K1 monoclonal antibody (Product # MA1-095) diluted by 3% BSA-PBS at a dilution of 1:20,000 overnight at 4°C in a humidified chamber. Tissues were washed extensively in PBST and detection was performed using an HRP-conjugated secondary antibody followed by colorimetric detection using a DAB kit. Tissues were counterstained with hematoxylin and dehydrated with ethanol and xylene to prep for mounting.



MEK1 Antibody (MA1-095) in Flow

Flow cytometry analysis of MEK1/MAP2K1 on HeLa cells. Cells were fixed, permeabilized and stained with a MEK1 /MAP2K1 monoclonal antibody (Product # MA1-095, green histogram), or with a mouse isotype control (black histogram) at a concentration of 20 µg/mL. After incubation of the primary antibody for 1 hour on ice, the cells were stained with a goat anti-mouse IgG secondary antibody, DyLight 488 conjugate (Product # 35502) at a dilution of 1:25 for 1 hour on ice. A representative 10,000 cells were acquired for each sample.



MEK1 Antibody (MA1-095) in ICC/IF

Immunofluorescent analysis of MAP2K1 (green) showing positive staining in the cytoplasm of NIH-3T3 cells (right) compared with a negative control in the absence of primary antibody (left). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes, blocked with 3% BSA-PBS for 30 minutes at room temperature and probed with a MAP2K1 monoclonal antibody (Product # MA1-095) in 3% BSA-PBS at a dilution of 1:200 and incubated overnight at 4 ºC in a humidified chamber. Cells were washed with PBST and incubated with a DyLight 488-conjugated goat-anti-mouse IgG (H+L) secondary antibody in PBS at room temperature in the dark. F-actin (red) was stained with a fluorescent red phalloidin and nuclei (blue) were stained with DAPI for 5-10 minutes in the dark. Images were taken at a magnification of 60x.

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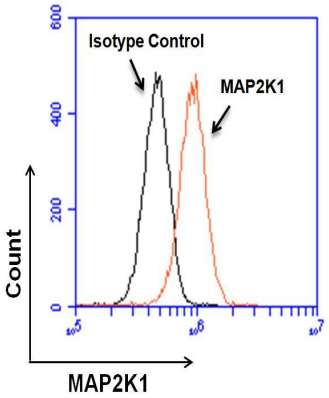

MEK1 Antibody (MA1-095) in Flow

Flow cytometry analysis of MEK1/MAP2K1 on NIH-3T3 cells. Cells were fixed, permeabilized and stained with a MEK1 /MAP2K1 monoclonal antibody (Product # MA1-095, orange histogram), or with a mouse isotype control (black histogram) at a concentration of 20 µg/mL. After incubation of the primary antibody for 1 hour on ice, the cells were stained with a goat anti-mouse IgG secondary antibody, DyLight 488 conjugate (Product # 35502) at a dilution of 1:25 for 1 hour on ice. A representative 10,000 cells were acquired for each sample.

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