abcam

Product datasheet

Anti-MEKK2 antibody [EP626Y] ab33918



ועלשעבעי RabMAb

★★★★★ 2 Abreviews 15 References 画像数 16

製品の概要

製品名 Anti-MEKK2 antibody [EP626Y]

製品の詳細 Rabbit monoclonal [EP626Y] to MEKK2

由来種 Rabbit

アプリケーション 適用あり: Flow Cyt (Intra), IHC-Fr, ICC/IF, WB, IHC-P, IP

種交差性 交差種: Mouse, Rat, Human

免疫原 Synthetic peptide. within Human MEKK2 aa 1-100 (N terminal). The exact sequence is

proprietary.

Database link: Q9Y2U5

ポジティブ・コントロール WB: A549, HeLa, Hap1, C6, NIH/3T3, K562 and Jurkat (ab7899) whole cell lysates; Human

breast carcinoma tissue lysate. Flow Cyt (intra): Jurkat and HepG2 cells. IHC-P: Human colon

carcinoma, mouse and rat cerebral cortex. ICCIF: MCF-7 cell line. IP: HepG2 cell line.

特記事項 This product is a recombinant monoclonal antibody, which offers several advantages including:

- High batch-to-batch consistency and reproducibility

- Improved sensitivity and specificity

- Long-term security of supply

- Animal-free production

For more information see here.

Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb patents**.

製品の特性

製品の状態 Liquid

保存方法 Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C.

Avoid freeze / thaw cycle.

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA

精製度 Protein A purified

ポリモノ モノクローナル

クローン名 EP626Y

アイソタイプ IgG

アプリケーション

The Abpromise guarantee <u>Abpromise保証は、</u>次のテスト済みアプリケーションにおけるab33918の使用に適用されます アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご検討ください。

アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/50 - 1/120. ab172730 - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.
IHC-Fr		Use at an assay dependent concentration.
ICC/IF		1/250 - 1/500.
WB	*** <u>*</u> (2)	1/10000 - 1/50000. Predicted molecular weight: 70 kDa.
IHC-P		1/100. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
IP		1/40.

ターゲット情報

機能 Component of a protein kinase signal transduction cascade. Regulates the JNK and ERK5

pathways by phosphorylating and activating MAP2K5 and MAP2K7 (By similarity). Plays a role in

caveolae kiss-and-run dynamics.

配列類似性 Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase

kinase subfamily.

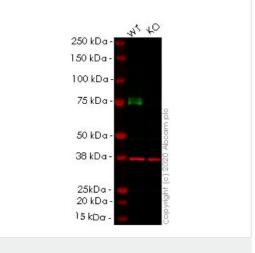
Contains 1 OPR domain.

Contains 1 protein kinase domain.

翻訳後修飾 Autophosphorylated.

細胞内局在 Cytoplasm. Nucleus. Upon EGF stimulation, translocates into the nucleus.

画像



Western blot - Anti-MEKK2 antibody [EP626Y] (ab33918)

All lanes: Anti-MEKK2 antibody [EP626Y] (ab33918) at 1/10000 dilution

Lane 1: Wild-type A549 cell lysate

Lane 2: MAP3K2 knockout A549 cell lysate

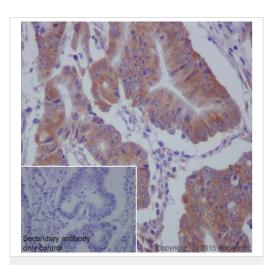
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 70 kDa **Observed band size:** 75 kDa

Lanes 1-2: Merged signal (red and green). Green - ab33918 observed at 75 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (ab8245) observed at 37 kDa.

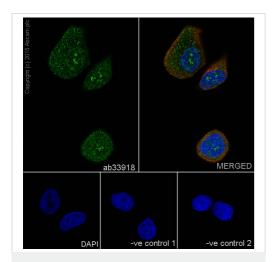
ab33918 was shown to react with MEKK2 in wild-type A549 cells in western blot. Loss of signal was observed when knockout cell line ab267153 (knockout cell lysate ab257522) was used. Wild-type A549 and MAP3K2 knockout A549 cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab33918 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) overnight at 4°C at a 1 in 10000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MEKK2 antibody
[EP626Y] (ab33918)

ab33918 staining MEKK2 in human colon carcinoma tissue sections by Immunohistochemistry (IHC-P - paraformaldehydefixed, paraffin-embedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/100. A goat anti-rabbit IgG H&L (HRP) ab97051 was used as the secondary antibody at a dilution of 1/500.

Negative control 1: PBS in place of primary antibody.

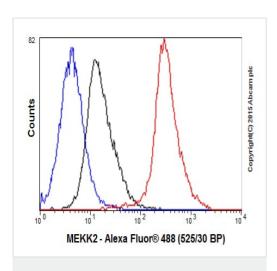


Immunocytochemistry/ Immunofluorescence - Anti-MEKK2 antibody [EP626Y] (ab33918)

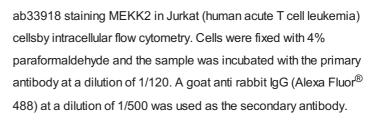
ab33918 staining MEKK2 in MCF-7 (human breast carcinoma) cells by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde and permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody at a dilution of 1/100. A goat anti rabbit IgG (Alexa Fluor® 488) (ab150077) was used as the secondary antibody at a dilution of 1/1000. ab7291 and ab150120 were used as counterstains for primary antibody ab75748 and secondary antibody ab150077 respectively and DAPI was used as a nuclear counterstain.

Negative control 1: Rabbit primary antibody and anti-mouse secondary antibody (<u>ab150120</u>)

Negative control 2: Mouse primary antibody (<u>ab7291</u>) and antirabbit secondary antibody (<u>ab150077</u>)

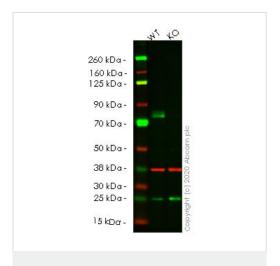


Flow Cytometry (Intracellular) - Anti-MEKK2 antibody [EP626Y] (ab33918)



Isoytype control: Rabbit monoclonal IgG (Black)

Unlabelled control: Cell without incubation with primary antibody and secondary antibody (Blue)



Western blot - Anti-MEKK2 antibody [EP626Y] (ab33918)

All lanes : Anti-MEKK2 antibody [EP626Y] (ab33918) at 1/10000 dilution

Lane 1: Wild-type A549 cell lysate

Lane 2: MAP3K2 knockout A549 cell lysate

Lysates/proteins at 20 µg per lane.

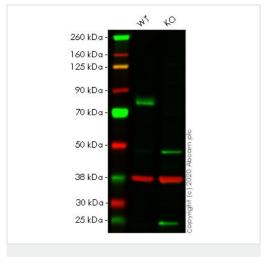
Performed under reducing conditions.

Predicted band size: 70 kDa **Observed band size:** 75 kDa

Lanes 1-2: Merged signal (red and green). Green - ab33918 observed at 75 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (ab8245) observed at 37 kDa.

ab33918 was shown to react with MEKK2 in wild-type A549 cells in western blot. Loss of signal was observed when knockout cell line ab267152 (knockout cell lysate ab257521) was used. Wild-type A549 and MAP3K2 knockout A549 cell lysates were subjected to

SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab33918 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) overnight at 4°C at a 1 in 10000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-MEKK2 antibody [EP626Y] (ab33918)

All lanes : Anti-MEKK2 antibody [EP626Y] (ab33918) at 1/10000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: MAP3K2 knockout HeLa cell lysate

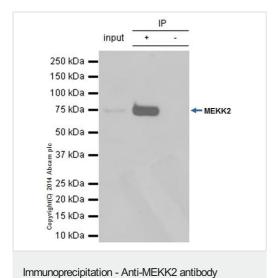
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

Predicted band size: 70 kDa
Observed band size: 75 kDa

Lanes 1-2: Merged signal (red and green). Green - ab33918 observed at 75 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (ab8245) observed at 37 kDa.

ab33918 was shown to react with MEKK2 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line ab264944 (knockout cell lysate ab257520) was used. Wild-type HeLa and MAP3K2 knockout HeLa cell lysates were subjected to SDS-PAGE. Membrane was blocked for 1 hour at room temperature in 0.1% TBST with 3% non-fat dried milk. ab33918 and Anti-GAPDH antibody [6C5] - Loading Control (ab8245) were incubated overnight at 4°C at a 1 in 10000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye®800CW) preadsorbed (ab216773) and Goat anti-Mouse lgG H&L (IRDye®680RD) preadsorbed (ab216776) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



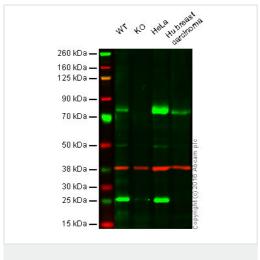
[EP626Y] (ab33918)

ab33918 immunoprecipitating MEKK2. 10µg of cell lysate was incubated with primary antibody at a dilution of 1/40 and VeriBlot for IP Detection Reagent (HRP) (ab131366) at a dilution of 1/10000.

Lane 1: HepG2 (human hepatocellular carcinoma) whole cell lysate (10ug)

Lane 2: HepG2 (human hepatocellular carcinoma) whole cell lysate

Lane 3: Rabbit monoclonal IgG (<u>ab172730</u>) instead of ab33918 in HepG2 (human hepatocellular carcinoma) whole cell lysate



Western blot - Anti-MEKK2 antibody [EP626Y] (ab33918)

Lane 1: Wild-type HAP1 cell lysate (20 µg)

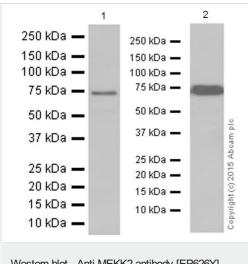
Lane 2: MEKK2 knockout HAP1 cell lysate (20 µg)

Lane 3: HeLa cell lysate (20 µg)

Lane 4: Human breast carcinoma lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab33918 observed at 75 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab33918 was shown to recognize MEKK2 when MEKK2 knockout samples were used, along with additional cross-reactive bands. Wild-type and MEKK2 knockout samples were subjected to SDS-PAGE. ab33918 and <u>ab8245</u> (loading control to GAPDH) were both diluted 1/10 000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (<u>ab216773</u>) andGoat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (<u>ab216776</u>) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-MEKK2 antibody [EP626Y] (ab33918)

All lanes : Anti-MEKK2 antibody [EP626Y] (ab33918) at 1/20000 dilution

Lane 1: C6 (rat glioma) whole cell lysate

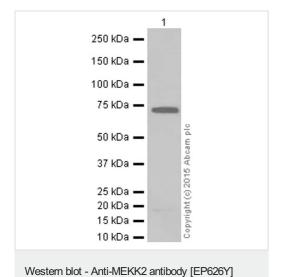
Lane 2: NIH/3T3 (mouse embryo) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 70 kDa



(ab33918)

K562 (human chronic myelogenous leukemia) whole cell lysate at $10\;\mu\text{g}$

Secondary

Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 70 kDa



Western blot - Anti-MEKK2 antibody [EP626Y] (ab33918)

All lanes : Anti-MEKK2 antibody [EP626Y] (ab33918) at 1/20000 dilution

Lane 1 : Jurkat (human acute T cell leukemia) whole cell lysate

Lane 2 : HeLa (human cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

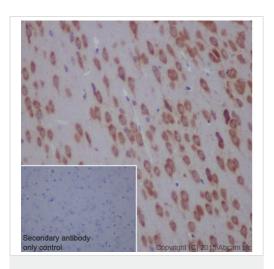
Secondary

All lanes : Goat Anti-Rabbit IgG H&L (HRP) (<u>ab97051</u>) at 1/20000 dilution

Predicted band size: 70 kDa

Additional bands at: 70 kDa. We are unsure as to the identity of

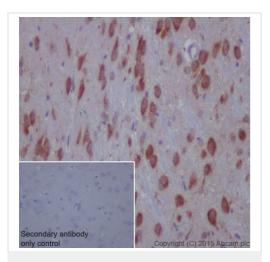
these extra bands.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MEKK2 antibody
[EP626Y] (ab33918)

ab33918 staining MEKK2 in mouse cerebral cortex tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/100. A goat anti-rabbit IgG H&L (HRP) ab97051 was used as the secondary antibody at a dilution of 1/500.

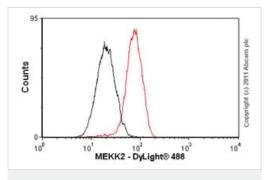
Negative control 1: PBS in place of primary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MEKK2 antibody
[EP626Y] (ab33918)

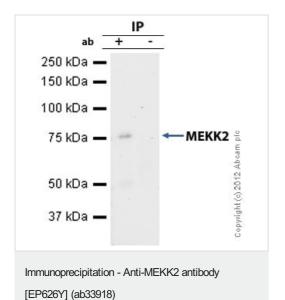
ab33918 staining MEKK2 in rat cerebral cortex tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffinembedded sections). Tissue was fixed with paraformaldehyde and antigen retrieval was by heat mediation in a EDTA buffer. Samples were incubated with primary antibody at a dilution of 1/100. A goat anti-rabbit IgG H&L (HRP) <u>ab97051</u> was used as the secondary antibody at a dilution of 1/500.

Negative control 1: PBS in place of primary antibody.



Flow Cytometry (Intracellular) - Anti-MEKK2 antibody [EP626Y] (ab33918)

Overlay histogram showing HepG2 cells stained with unpurified ab33918 (red line). The cells were fixed with 80% methanol (5 min) and then permeabilized with 0.1% PBS-Tween for 20 min. The cells were then incubated in 1x PBS / 10% normal goat serum / 0.3M glycine to block non-specific protein-protein interactions followed by the antibody (ab33918, 1/50 dilution) for 30 min at 22°C. The secondary antibody used was DyLight® 488 goat anti-rabbit lgG (H+L) (ab96899) at 1/500 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit lgG (monoclonal) (1 μ g/1x106 cells) used under the same conditions. Acquisition of >5,000 events was performed.



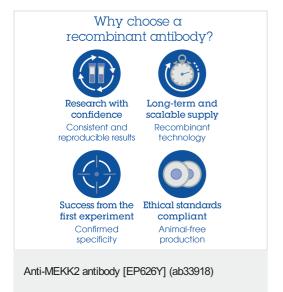
MEKK2 was immunoprecipitated using 0.5mg HepG2 whole cell extract, 10µg of unpurified Rabbit monoclonal [EP626Y] to MEKK2 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, HepG2 whole cell extract lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab33918.

Secondary: Mouse monoclonal [SB62a] Secondary Antibody to Rabbit IgG light chain (HRP) (ab99697).

Band: 75kDa: MEKK2.



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