abcam

Product datasheet

Anti-MEF2A + MEF2C antibody [EPR19089-34] ab197070

KO VALIDATED Recombinant RabMAb

2 Abreviews 10 References 18 Images

Overview

Product name	Anti-MEF2A + MEF2C antibody [EPR19089-34]
Description	Rabbit monoclonal [EPR19089-34] to MEF2A + MEF2C
Host species	Rabbit
Tested applications	**Suitable for:** Flow Cyt (Intra), WB, IHC-P, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat, Human
Immunogen	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: Raji, Ramos, Daudi, C6 and RAW 264.7 whole cell lysates; Mouse cerebral cortex and brain lysates; Rat cerebral cortex, brain and spleen lysates; Wild-type THP-1 and Daudi cell lysates. IHC-P: Human tonsil and colonic adenocarcinoma tissues; Mouse spleen and colon tissues; Rat spleen tissue. ICC/IF: K562 and Raji cells.
General notes	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**.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol, 0.05% BSA
Purity	Protein A purified
Clonality	Monoclonal
Clone number	EPR19089-34

Isotype IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab197070 in the following tested applications.

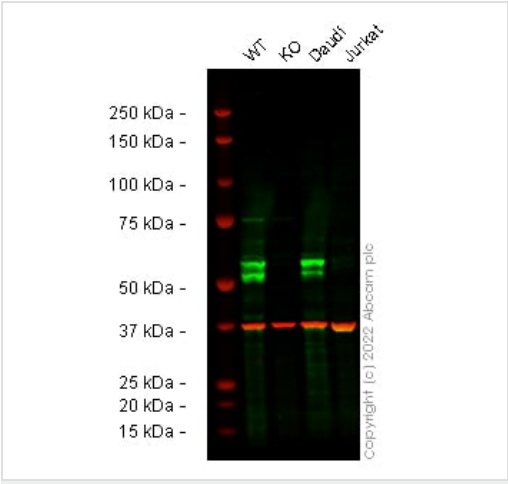
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
Flow Cyt (Intra)		1/30.
WB	★★★★★ (1)	1/1000. Detects a band of approximately 50-60 kDa (predicted molecular weight: 51 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/250.

Target

Cellular localization MEF2A: Nucleus. MEF2C: Nucleus.

Images



Western blot - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

All lanes : Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070) at 1/1000 dilution

Lane 1 : Wild-type THP-1 cell lysate
Lane 2 : MEF2C knockout THP-1 cell lysate
Lane 3 : Daudi cell lysate
Lane 4 : Jurkat cell lysate

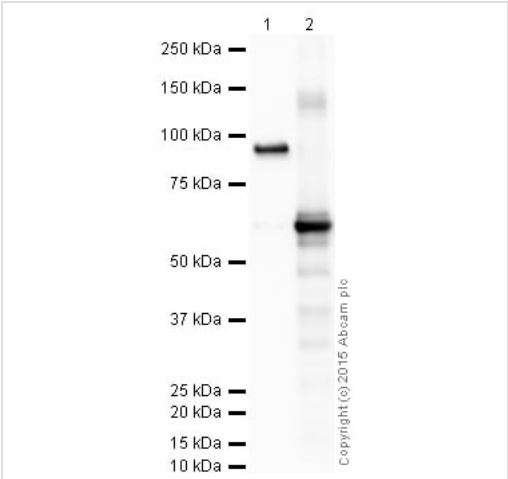
Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution

Performed under reducing conditions.

Predicted band size: 51 kDa
Observed band size: 55/60 kDa

False colour image of Western blot: Anti-MEF2A + MEF2C antibody [EPR19089-34] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] (**ab8245**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab197070 was shown to bind specifically to MEF2C. A band was observed at 55/60 kDa in wild-type THP-1 cell lysates with no signal observed at this size in MEF2C knockout cell line. To generate this image, wild-type and MEF2C knockout THP-1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L 800CW and Goat anti-Mouse IgG H&L 680RD at 1/20000 dilution.



Western blot - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

All lanes : Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070) at 1/1000 dilution

Lane 1 : Recombinant Human MEF2A protein (**ab152519**)
Lane 2 : Human MEF2C full length protein

Lysates/proteins at 0.1 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) preadsorbed at 1/50000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

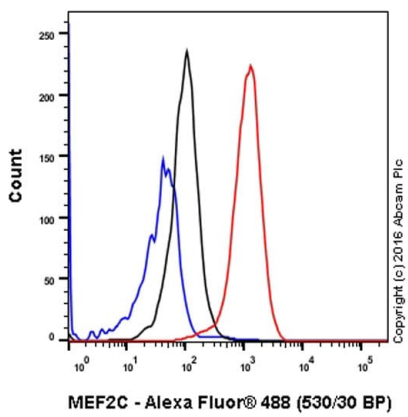
Predicted band size: 51 kDa
Observed band size: 55,83 kDa

Exposure time: 1 minute

ab197070 recognizes the full length tagged recombinant proteins MEF2A and MEF2C which have expected molecular weights of 83

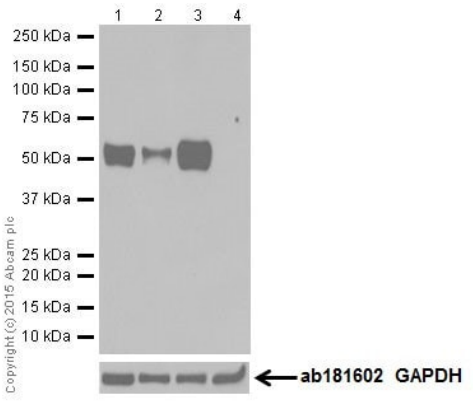
and 55 kDa respectively.

This blot was produced using a 4-12% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab197070 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution **ab133406**.



Flow Cytometry (Intracellular) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Intracellular Flow Cytometry analysis of Raji (human Burkitt's lymphoma) labelling MEF2A + MEF2C with purified ab197070 at 1/30 (red). Cells were fixed with 4% paraformaldehyde and permeabilised with 90% methanol. Alexa Fluor® 488 goat anti-rabbit IgG (1/2000) was used as the secondary antibody. Black - Isotype control, rabbit monoclonal IgG. Blue - Unlabelled control, cells without incubation with primary and secondary antibodies.



Western blot - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

All lanes : Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070) at 1/1000 dilution

Lane 1 : Raji (Human Burkitt's lymphoma cell line) whole cell lysate
Lane 2 : Ramos (Human Burkitt's lymphoma cell line) whole cell lysate
Lane 3 : Daudi (Human Burkitt's lymphoma cell line) whole cell lysate
Lane 4 : Jurkat (Human T cell leukemia cells from peripheral blood) whole cell lysate

Lysates/proteins at 20 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

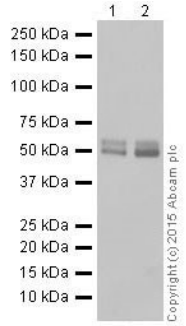
Predicted band size: 51 kDa
Observed band size: 50-60 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

MEF2C is expressed specifically in cells from B-lymphocyte lineage but not T cell lineage. Jurkat cell lysate serves as a negative control (PMID: 9798649).

The 50-60KD bands observed are consistent with what has been described in the literature (PMID: 18450586)



Western blot - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

All lanes : Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070) at 1/5000 dilution

Lane 1 : Mouse cerebral cortex lysate
Lane 2 : Rat cerebral cortex lysate

Lysates/proteins at 20 µg per lane.

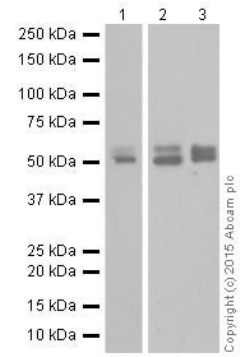
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 51 kDa
Observed band size: 50-60 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.

The 50-60KD bands observed are consistent with what has been described in the literature (PMID: 18450586)



Western blot - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

All lanes : Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070) at 1/1000 dilution

Lane 1 : Mouse brain lysate
Lane 2 : Rat brain lysate
Lane 3 : Rat spleen lysate

Lysates/proteins at 10 µg per lane.

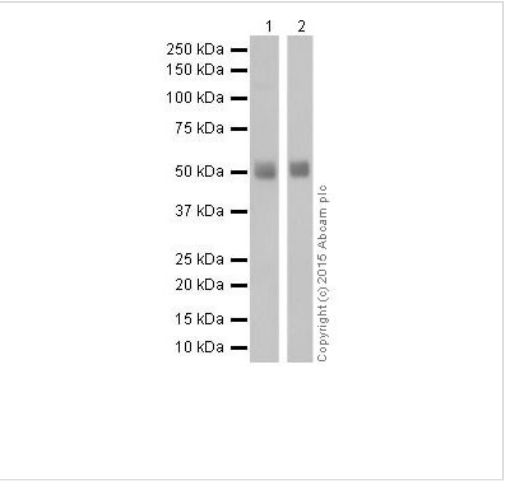
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 51 kDa
Observed band size: 50-60 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 1minute; Lane 2 and 3: 3minutes.

The 50-60KD bands observed are consistent with what has been described in the literature (PMID: 18450586).



Western blot - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

All lanes : Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070) at 1/1000 dilution

Lane 1 : C6 (Rat glial tumor cells) whole cell lysate
Lane 2 : Raw264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate

Lysates/proteins at 10 µg per lane.

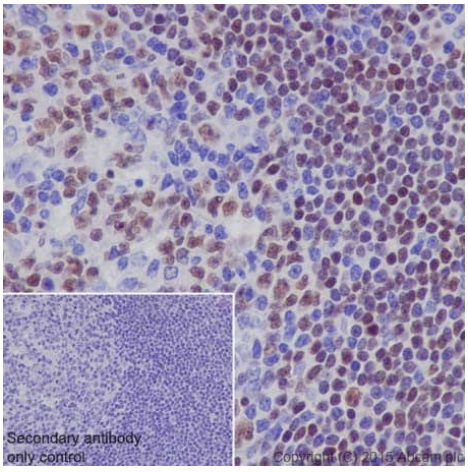
Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 51 kDa
Observed band size: 50-60 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

Exposure time: Lane 1: 15 seconds; Lane 2: 30 seconds.

The 50-60KD bands observed are consistent with what has been described in the literature (PMID: 18450586).

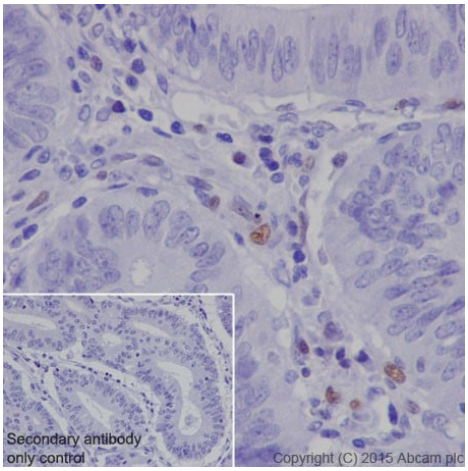


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunohistochemical analysis of paraffin-embedded Human tonsil tissue labeling MEF2C with ab197070 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining on B lymphocytes of the Human tonsil is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

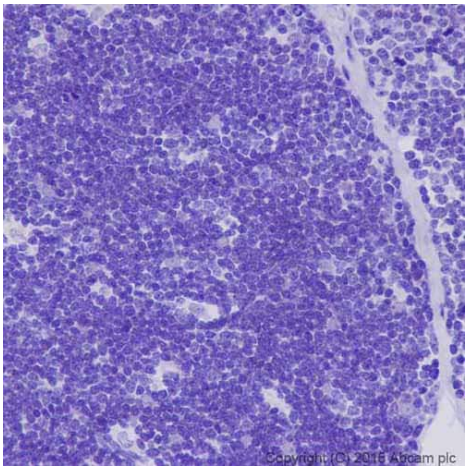


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunohistochemical analysis of paraffin-embedded Human colonic adenocarcinoma tissue labeling MEF2C with ab197070 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nucleus staining on lymphocytes of the colonic adenocarcinoma is observed. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

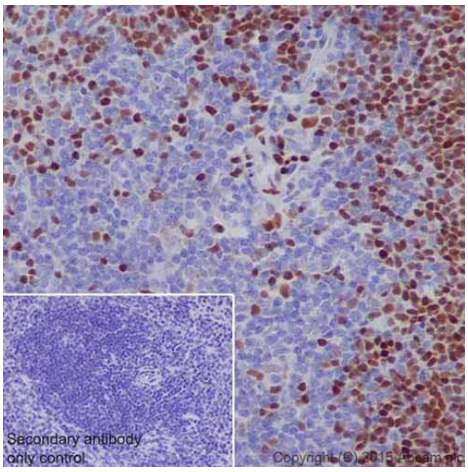
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunohistochemical analysis of paraffin-embedded Human thymus tissue labeling MEF2C with ab197070 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Negative staining on normal Human thymus is observed. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

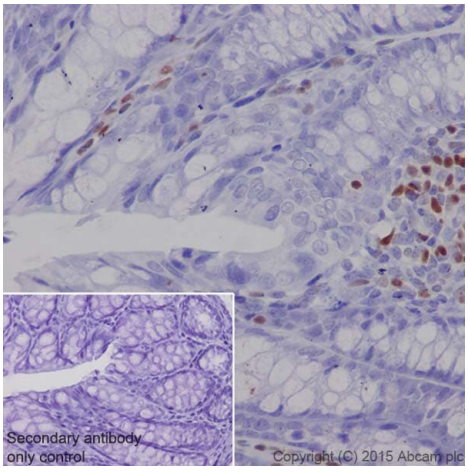


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunohistochemical analysis of paraffin-embedded Mouse spleen tissue labeling MEF2C with ab197070 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining on B lymphocytes of the mouse spleen, the T cells in the periarterial lymphatic sheath showed negative staining. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

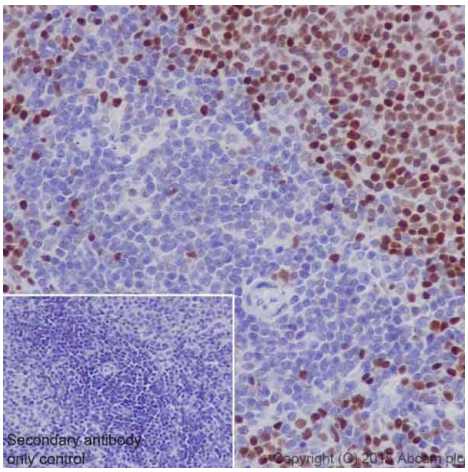


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunohistochemical analysis of paraffin-embedded Mouse colon tissue labeling MEF2C with ab197070 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Negative staining on the mouse colon epithelium, the lymphocytes on the interstitial substance showed nuclear staining. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

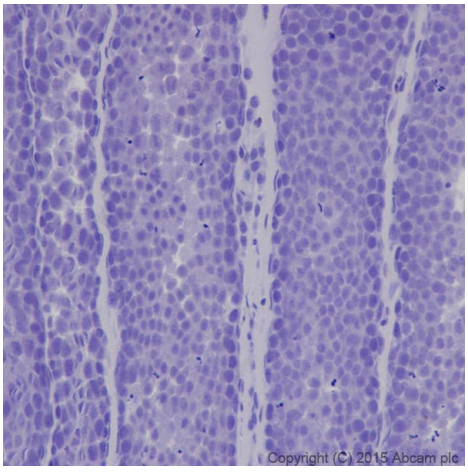


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunohistochemical analysis of paraffin-embedded Rat spleen tissue labeling MEF2C with ab197070 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Nuclear staining on B lymphocytes of the rat spleen, the T cells in the periarterial lymphatic sheath showed negative staining. Counter stained with Hematoxylin.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution.

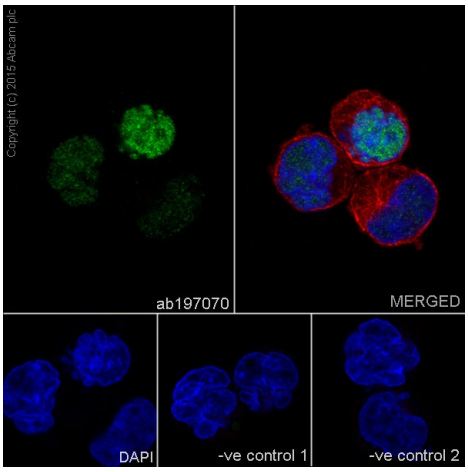
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunohistochemical analysis of paraffin-embedded Rat testis tissue labeling MEF2C with ab197070 at 1/500 dilution, followed by Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/500 dilution. Negative staining on rat testis is observed. Counter stained with Hematoxylin.

Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



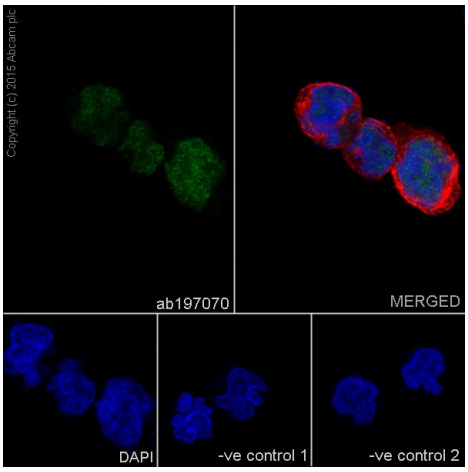
Immunocytochemistry/ Immunofluorescence - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized K562 (Human chronic myelogenous leukemia cells from bone marrow) cells labeling MEF2C with ab197070 at 1/250 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear staining on K562 cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab197070 at 1/250 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.



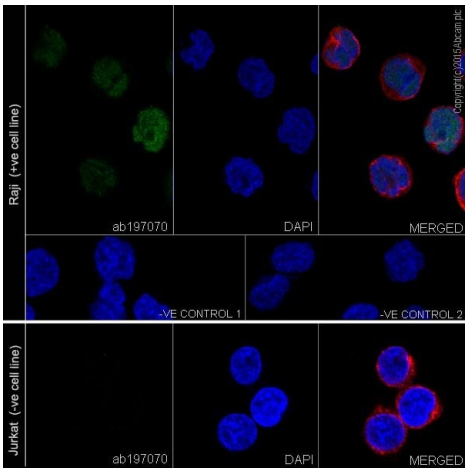
Immunocytochemistry/ Immunofluorescence - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Raji (Human Burkitt's lymphoma cell line) cells labeling MEF2C with ab197070 at 1/250 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear staining on Raji cell line. The nuclear counterstain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab197070 at 1/250 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.



Immunocytochemistry/ Immunofluorescence - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized Raji (Human Burkitt's lymphoma cell line) and Jurkat (Human T cell leukemia cells from peripheral blood) cells labeling MEF2C with ab197070 at 1/250 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/1000 dilution (green). Confocal image showing nuclear staining on Raji cell line. Negative expression in Jurkat cells. The nuclear counterstain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution (red).

The negative controls are as follows:-

-ve control 1: ab197070 at 1/250 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

-ve control 2: **ab7291** (anti-Tubulin mouse mAb) at 1/1000 dilution followed by **ab150077** (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/1000 dilution.

Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

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