# abcam

## Product datasheet

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



★★★★★ 2 Abreviews 10 References 画像数 18

#### 製品の概要

製品名 Anti-MEF2A + MEF2C antibody [EPR19089-34]

製品の詳細 Rabbit monoclonal [EPR19089-34] to MEF2A + MEF2C

由来種 Rabbit

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

種交差性 交差種: Mouse, Rat, Human

免疫原 Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

ポジティブ・コントロール 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.

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

クローン名

製品の状態

保存方法 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.

EPR19089-34

バッファー pH: 7.2

Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol, 0.05% BSA

精製度 Protein A purified

ポリ/モノ モノクローナル

## 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ab197070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。

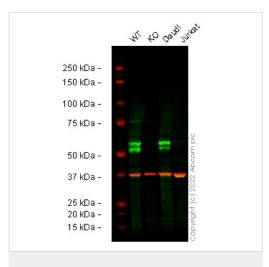
アプリケーション	Abreviews	特記事項
Flow Cyt (Intra)		1/30.
WB	**** (1)	1/1000. Detects a band of approximately 50-60 kDa (predicted molecular weight: 51 kDa).
IHC-P		1/500. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.
ICC/IF		1/250.

#### ターゲット情報

細胞内局在

MEF2A: Nucleus, MEF2C: Nucleus,

## 画像



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 lgG 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

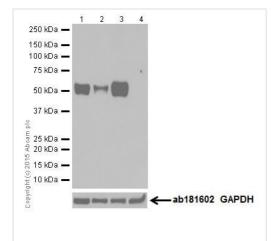
ab197070 recognizes the full length tagged recombinant proteins MEF2A and MEF2C which have expected molecular weights of 83

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<sup>®</sup> 488 goat antirabbit lgG (1/2000) was used as the secondary antibody. Black - lsotype control, rabbit monoclonal lgG. 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  $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$  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)

1 2
250 kDa —
150 kDa —
100 kDa —
75 kDa —
50 kDa —
37 kDa —
25 kDa —
20 kDa —
15 kDa —
115 kDa —

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 lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

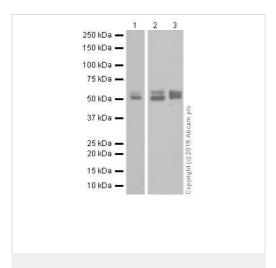
**Predicted band size:** 51 kDa **Observed band size:** 50-60 kDa

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  $\lg G \ H\&L \ (HRP) \ (\underline{ab97051})$  at 1/100000 dilution

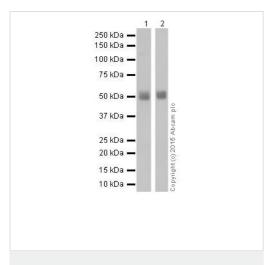
**Predicted band size:** 51 kDa **Observed band size:** 50-60 kDa

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 lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

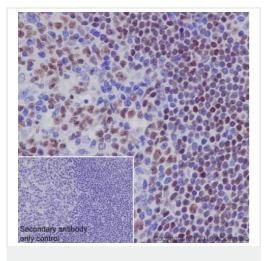
**Predicted band size:** 51 kDa **Observed band size:** 50-60 kDa

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).



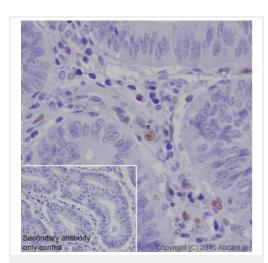
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

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 lgG H&L (HRP) (ab97051) at 1/500 dilution.

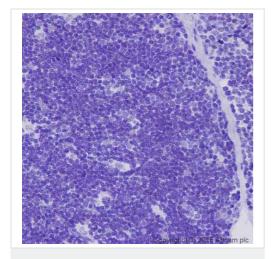


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

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.

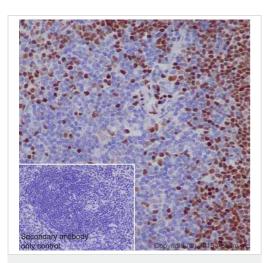
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/500 dilution.

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



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded 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.



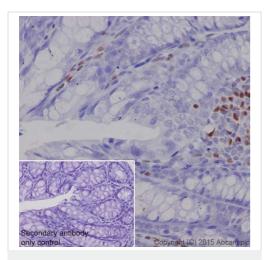
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

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 lgG 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.

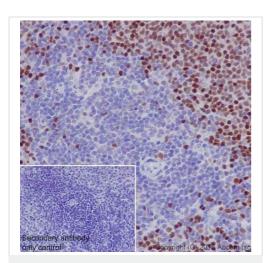


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

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 lgG H&L (HRP) (ab97051) at 1/500 dilution.



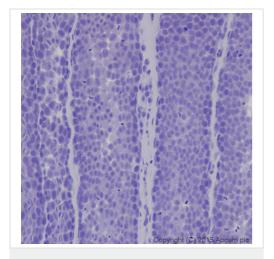
Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

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 lgG H&L (HRP) (ab97051) at 1/500 dilution.

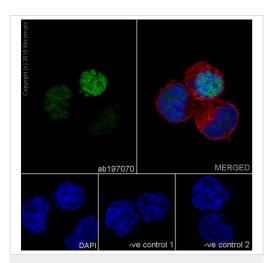
Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded 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.



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 lgG (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 <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

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

ab197070 MERGED

DAPI -ve control 1 -ve control 2

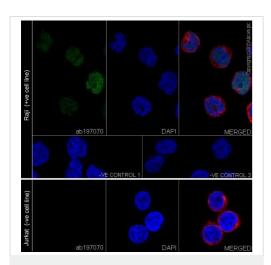
Immunocytochemistry/ Immunofluorescence - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

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 lgG (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 <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

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



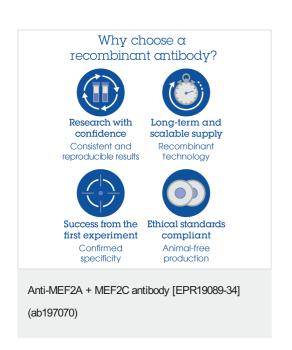
Immunocytochemistry/ Immunofluorescence - Anti-MEF2A + MEF2C antibody [EPR19089-34] (ab197070)

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 lgG (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 <u>ab150120</u> (AlexaFluor®594 Goat anti-Mouse secondary) at 1/1000 dilution.

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



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