abcam

Product datasheet

Anti-Calcineurin A antibody [EPR1670(2)] ab109412

KO 評価済 リコンビナント RabMAb

5 References 画像数 7

製品の概要

製品名	Anti-Calcineurin A antibody [EPR1670(2)]
製品の詳細	Rabbit monoclonal [EPR1670(2)] to Calcineurin A
由来種	Rabbit
アプリケーション	**適用あり:** Flow Cyt (Intra), WB, ICC/IF **適用なし:** IHC-P or IP
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
ポジティブ・コントロール	Fetal brain, SH-SY5Y, A431, and HeLa cell lysates; HeLa cells. Mouse and rat brain cortex lysates.
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 -20°C. Stable for 12 months at -20°C.
バッファー	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 0.1% BSA, 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR1670(2)

アイソタイプ IgG

アプリケーション

The Abpromise guarantee **Abpromise保証は、次のテスト済みアプリケーションにおけるab109412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)		1/10 - 1/100. **ab172730** - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB		1/10000 - 1/50000. Detects a band of approximately 58 kDa (predicted molecular weight: 59 kDa).
ICC/IF		1/100 - 1/250.

追加情報 Is unsuitable for IHC-P or IP.

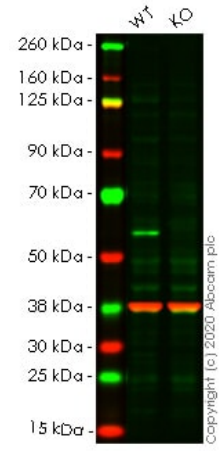
ターゲット情報

機能 Calcium-dependent, calmodulin-stimulated protein phosphatase. This subunit may have a role in the calmodulin activation of calcineurin. Dephosphorylates DNM1L, HSPB1 and SSH1.

配列類似性 Belongs to the PPP phosphatase family. PP-2B subfamily.

細胞内局在 Nucleus. Colocalizes with ACTN1 and MYOZ2 at the Z line in heart and skeletal muscle.

画像



Western blot - Anti-Calcineurin A antibody [EPR1670(2)] (ab109412)

All lanes : Anti-Calcineurin A antibody [EPR1670(2)] (ab109412) at 1/10000 dilution

Lane 1 : Wild-type HeLa cell lysate

Lane 2 : PPP3CA knockout HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

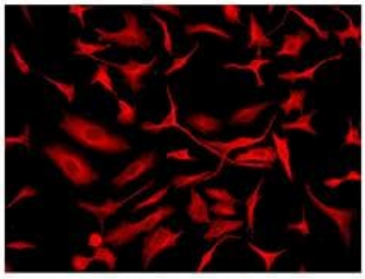
Predicted band size: 59 kDa

Observed band size: 59 kDa

Lanes 1- 2: Merged signal (red and green). Green - ab109412

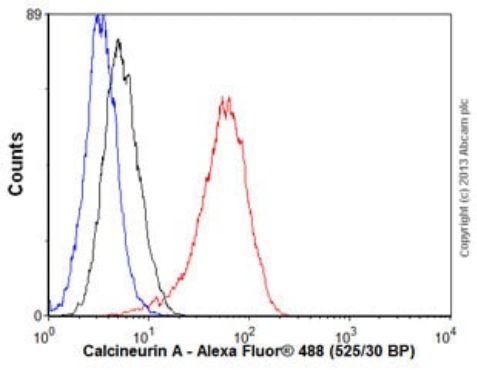
observed at 59 kDa. Red - Anti-GAPDH antibody [6C5] - Loading Control (**ab8245**) observed at 37 kDa.

ab109412 was shown to react with Calcineurin A in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line **ab265130** (knockout cell lysate **ab257181**) was used. Wild-type HeLa and PPP3CA 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. ab109412 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.



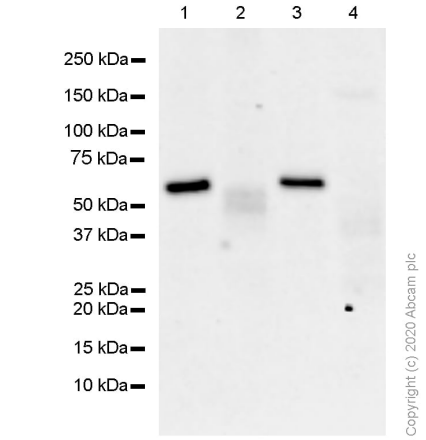
Immunocytochemistry/ Immunofluorescence - Anti-Calcineurin A antibody [EPR1670(2)] (ab109412)

Immunofluorescent staining of HeLa cells using 1/100 ab109412.



Flow Cytometry (Intracellular) - Anti-Calcineurin A antibody [EPR1670(2)] (ab109412)

Overlay histogram showing HeLa cells stained with ab109412 (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 (ab109412, 1/100 dilution) for 30 min at 22°C. The secondary antibody used was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) (**ab150077**) at 1/2000 dilution for 30 min at 22°C. Isotype control antibody (black line) was rabbit IgG (monoclonal) (1µg/1x10^6 cells) used under the same conditions. Unlabelled sample (blue line) was also used as a control. Acquisition of >5,000 events were collected using a 20mW Argon ion laser (488nm) and 525/30 bandpass filter.



Western blot - Anti-Calcineurin A antibody [EPR1670(2)] (ab109412)

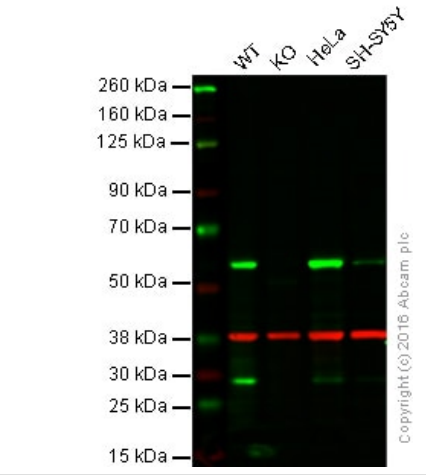
All lanes : Anti-Calcineurin A antibody [EPR1670(2)] (ab109412) at 1/3000 dilution

Lane 1 : Mouse brain cortex lysate
Lane 2 : Mouse lung lysate
Lane 3 : Rat brain cortex lysate
Lane 4 : Rat liver lysate

Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) at 1/20000 dilution

Predicted band size: 59 kDa
Observed band size: 58 kDa

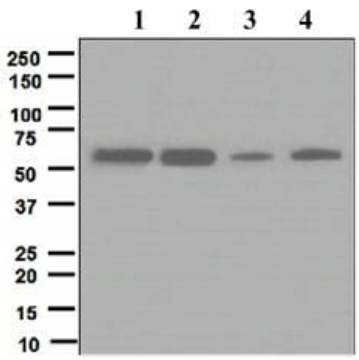


Western blot - Anti-Calcineurin A antibody [EPR1670(2)] (ab109412)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: Calcineurin A knockout HAP1 cell lysate (20 µg)
Lane 3: A431 cell lysate (20 µg)
Lane 4: HeLa cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab109412 observed at 60 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab109412 was shown to specifically react with Calcineurin A when Calcineurin A knockout samples were used. Wild-type and Calcineurin A knockout samples were subjected to SDS-PAGE. ab109412 and **ab8245** (loading control to GAPDH) were both diluted 1/10000 and incubated overnight at 4°C. 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 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Calcineurin A antibody [EPR1670(2)] (ab109412)

All lanes : Anti-Calcineurin A antibody [EPR1670(2)] (ab109412) at 1/10000 dilution

Lane 1 : fetal brain lysate
Lane 2 : SH-SY5Y lysate
Lane 3 : A431 lysate
Lane 4 : HeLa cells lysate

Lysates/proteins at 10 µg per lane.

Predicted band size: 59 kDa
Observed band size: 58 kDa

Anti-Calcineurin A antibody [EPR1670(2)] (ab109412)

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