abcam

Product datasheet

Anti-Calpain small subunit 1 antibody [EPR3324] ab92333

KO 評価済 リコンピナント RabMAb

8 References 画像数5

製品の概要

製品名 Anti-Calpain small subunit 1 antibody [EPR3324]

製品の詳細 Rabbit monoclonal [EPR3324] to Calpain small subunit 1

由来種 Rabbit

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

適用なし: №

種交差性 交差種: Human

交差が予測される動物種: Mouse, Rat, Chinese hamster 🔷

免疫原 Synthetic peptide within Human Calpain small subunit 1 aa 100-200. The exact sequence is

proprietary.

ポジティブ・コントロール WB: fetal brain or fetal spleen tissue lysate; T47D or 293T cell lysate. IHC: Human kidney tissue.

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

Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C. 保存方法

バッファー pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

supernatant

精製度 Protein A purified

ポリモノ モノクローナル

アイソタイプ

ΙgG

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ab92333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
WB		
IHC-P		
Flow Cyt (Intra)		

追加情報 Flow Cyt: 1/50.

ICC: 1/100 - 1/250.

IHC-P: 1/100 - 1/250. Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol. The use of an HRP/AP polymerized antibody will

give a stronger signal.

WB: 1/1000 - 1/5000. Predicted molecular weight: 28 kDa.

Is unsuitable for IP.

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

ターゲット情報

機能 Regulatory subunit of the calcium-regulated non-lysosomal thiol-protease which catalyzes limited

proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.

配列類似性 Contains 5 EF-hand domains.

ドメイン The contact of the 5th EF-hand domain from each monomer allows the formation of the

homodimer and also appears to mediate the contact between the large catalytic subunit and small

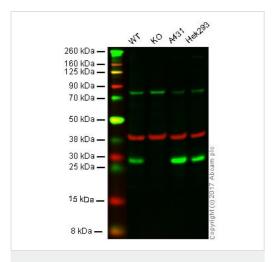
regulatory subunit for the formation of the heterodimer.

EF-hand domains are paired. EF-hand 1 is paired with EF-hand 2 and EF-hand 3 is paired with EF-hand 4. The fifth EF-hand domain, left unpaired, does not bind the calcium but is responsible of the dimerization by EF-embrace. The first four EF-hand domains bind calcium, however it is not

sure if the binding of EF-hand 4 to calcium is physiologically relevant.

細胞内局在 Cytoplasm. Cell membrane. Translocates to the plasma membrane upon calcium binding.

画像



Western blot - Anti-Calpain small subunit 1 antibody [EPR3324] (ab92333)



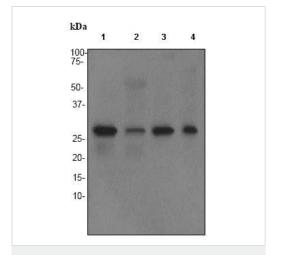
Lane 2: Calpain small subunit 1 knockout HAP1 whole cell lysate (20 µg)

Lane 3: A431 whole cell lysate (20 µg)

Lane 4: HEK293 whole cell lysate (20 µg)

Lanes 1 - 4: Merged signal (red and green). Green - ab92333 observed at 28 kDa. Red - loading control, **ab8245**, observed at 37 kDa.

ab92333 was shown to recognize Calpain small subunit 1 when Calpain small subunit 1 knockout samples were used, along with additional cross-reactive bands. Wild-type and Calpain small subunit 1 knockout samples were subjected to SDS-PAGE. Ab92333 and ab8245 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/10000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Calpain small subunit 1 antibody [EPR3324] (ab92333)

All lanes : Anti-Calpain small subunit 1 antibody [EPR3324] (ab92333) at 1/2000 dilution

Lane 1: T-47D cell lysate

Lane 2: Fetal brain tissue lysate

Lane 3: Fetal spleen tissue lysate

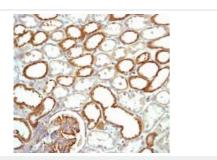
Lane 4: 293T (Human embryonic kidney epithelial cell) cell lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: Goat anti-Rabbit HRP at 1/2000 dilution

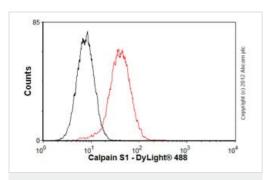
Predicted band size: 28 kDa Observed band size: 28 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calpain small subunit 1 antibody [EPR3324] (ab92333)

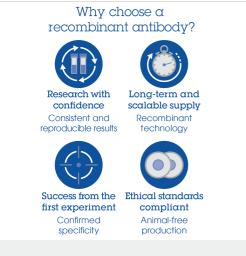
Immunohistochemistry staining of Calpain small subunit 1 in formalin-fixed, paraffin-embedded Human kidney tissue using 1/100 ab92333.

Heat mediated antigen retrieval was performed via the pressure cooker method before commencing with IHC staining protocol.



Flow Cytometry (Intracellular) - Anti-Calpain small subunit 1 antibody [EPR3324] (ab92333)

Overlay histogram showing HeLa cells stained with ab92333 (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 (ab92333, 1/100 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) (1µg/1x106 cells) used under the same conditions. Acquisition of >5,000 events was performed. This antibody gave a positive signal in HeLa cells fixed with 4% paraformaldehyde (10 min)/permeabilized with 0.1% PBS-Tween for 20 min used under the same conditions.



Anti-Calpain small subunit 1 antibody [EPR3324] (ab92333)

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