abcam

Product datasheet

Anti-Calpain small subunit 1 antibody [EPR3323] ab92356



4 References 画像数 4

製品の概要

製品名 Anti-Calpain small subunit 1 antibody [EPR3323]

製品の詳細 Rabbit monoclonal [EPR3323] to Calpain small subunit 1

由来種 Rabbit

アプリケーション 適用あり: WB, IHC-P

適用なし: №

交差種: Mouse, Human 種交差性

交差が予測される動物種: Rat 4

免疫原 Synthetic peptide within Human Calpain small subunit 1 aa 50-150. The exact sequence is

proprietary.

Database link: P04632

ポジティブ・コントロール WB: Hap1 cells, HepG2 cells, HeLa cells; T47-D cell lysate, HEK293T cell lysate, A431 cell

lysate, Human spleen lysate. IHC-P: human kidney.

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

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: 0.05% Sodium azide

Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture

supernatant

精製度 Protein A purified

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ab92356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		1/1000 - 1/2000. Predicted molecular weight: 28 kDa.
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 is recommended as these have been shown to give superior staining.

追加情報 Is unsuitable for IP.

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.

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.

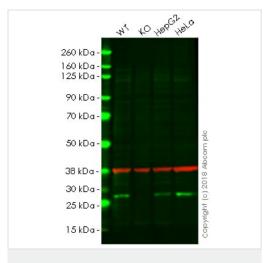
EF-hand domains are paired. EF-hand 1 is paired with EF-hand 2 and EF-hand 3 is paired with EF-hand 4. The fifth EF-hand domain, left unpaired, does not bind the calcium but is responsible of the dimerization by EF-embrace. The first four EF-hand domains bind calcium, however it is not

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

Cytoplasm. Cell membrane. Translocates to the plasma membrane upon calcium binding.

画像

細胞内局在



Western blot - Anti-Calpain small subunit 1 antibody [EPR3323] (ab92356)

All lanes : Anti-Calpain small subunit 1 antibody [EPR3323] (ab92356) at 1/1000 dilution

Lane 1 : Wild-type HAP1 whole cell lysate

Lane 2 : CAPNS1 (Calpain small subunit 1) knockout HAP1 whole cell lysate

Lane 3: HepG2 whole cell lysate

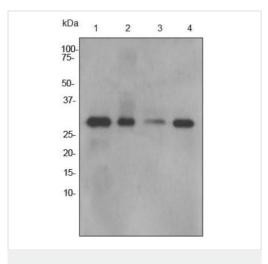
Lane 4: HeLa whole cell lysate

Lysates/proteins at 40 µg per lane.

Predicted band size: 28 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab92356 observed at 82 kDa. Red - loading control, **ab9484**, observed at 37 kDa.

ab92356 was shown to specifically react with Calpain 1 in wild-type HAP1 cells as signal was lost in CAPNS1 (Calpain small subunit 1) knockout cells. Wild-type and CAPNS1 (Calpain small subunit 1) knockout samples were subjected to SDS-PAGE. ab92356 and ab9484 (Mouse anti GAPDH loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/20000 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 1/20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Calpain small subunit 1 antibody [EPR3323] (ab92356)

All lanes : Anti-Calpain small subunit 1 antibody [EPR3323] (ab92356) at 1/1000 dilution

Lane 1: T47-D cell lysate
Lane 2: 293T cell lysate
Lane 3: A431 cell lysate

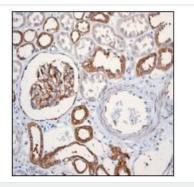
Lane 4: Human spleen lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes: HRP labelled goat anti-rabbit antibody at 1/2000 dilution

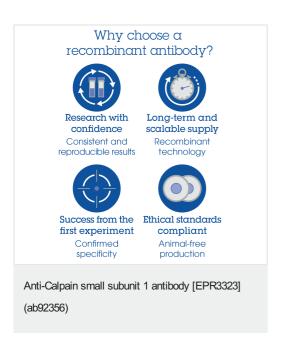
Predicted band size: 28 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calpain small subunit 1 antibody [EPR3323] (ab92356)

ab92356 at 1/100 dilution staining Calpain small subunit 1 in paraffin-embedded Human kidney

Perform heat mediated antigen retrieval via the pressure cooker method before commencing with IHC staining protocol.



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