abcam

Product datasheet

Anti-Calpain 1 antibody [EPR3319] ab108400





重组 RabMAb

★★★★★ 1 Abreviews 18 References 12 图像

概述

产品名称 Anti-Calpain 1抗体[EPR3319]

描述 兔单克隆抗体[EPR3319] to Calpain 1

宿主 Rabbit

特异性 This antibody recognises the large subunit of Calpain

经测试应用 适用于: WB, IHC-P, ICC/IF, Flow Cyt (Intra)

种属反应性 与反应: Mouse, Rat, Human

免疫原 Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.

阳性对照 Human fetal kidney, U937, A431, (D) 293T, and T47D cell lysates; Human kidney tissue; HeLa

cells.

常规说明 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**.

性能

形式 Liquid

存放说明 Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.

存储溶液 pH: 7.20

Preservative: 0.01% Sodium azide

Constituents: 40% Glycerol, 59% PBS, 0.05% BSA

纯度 Protein A purified

克隆 单克隆 克隆编号 **EPR3319**

同种型 ΙgG

The Abpromise guarantee Abpromise™承诺保证使用ab108400于以下的经测试应用

"应用说明"部分下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000 - 1/5000. Predicted molecular weight: 82 kDa. For unpurified use at 1/1000 - 1/10000.
IHC-P		1/200. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See IHC antigen retrieval protocols. For unpurified use at 1/500 - 1/1000.
ICC/IF		1/50. For unpurified use at 1/250 - 1/500.
Flow Cyt (Intra)		1/380. For unpurified use at 1/100 - 1/500. <u>ab172730</u> - Rabbit monoclonal lgG, is suitable for use as an isotype control with this antibody.

靶标

功能 Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates

involved in cytoskeletal remodeling and signal transduction.

组织特异性 Ubiquitous.

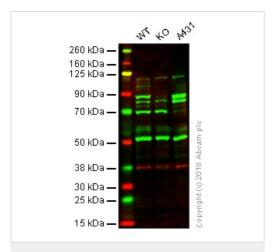
序列相似性 Belongs to the peptidase C2 family.

Contains 1 calpain catalytic domain.

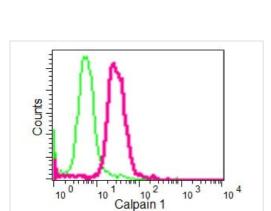
Contains 4 EF-hand domains.

细胞定位 Cytoplasm. Cell membrane. Translocates to the plasma membrane upon Ca(2+) binding.

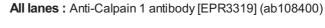
图片



Western blot - Anti-Calpain 1 antibody [EPR3319] (ab108400)



Flow Cytometry (Intracellular) - Anti-Calpain 1 antibody [EPR3319] (ab108400)



Lane 1: Wild type HAP1 whole cell lysate

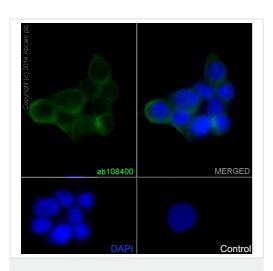
Lane 2: CAPN1 (Calpain 1) knockout HAP1 whole cell lysate

Lane 3: A431 whole cell lysate

Predicted band size: 82 kDa

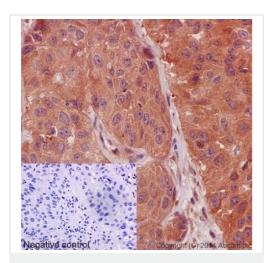
Ab108400 was shown to recognize Calpain 1 in wild-type HAP1. A faint cross-reactive band was observed in CAPN1 (Calpain 1) knockout cells at 82 kDa when over-exposed. Due to the immunogen's homology with CAPN2 (Calpain 2 Uniprot: P17655), this band could correspond to the Calpain 2 protein. Please note that cross-reactivity with this protein has not been confirmed experimentally.

Overlay histogram showing Jurkat cells stained with ab108400 (red line) at 1/380 dilution. The cells were fixed with 2% paraformal dehyde. The secondary antibody used was a FITC conjugated goat anti-rabbit IgG at 1/150 dilution. Isotype control antibody (green line) was rabbit monoclonal IgG used under the same conditions.



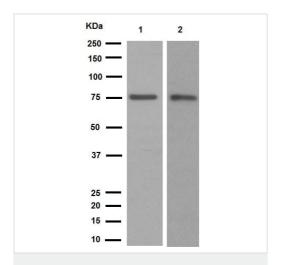
Immunocytochemistry/ Immunofluorescence - Anti-Calpain 1 antibody [EPR3319] (ab108400)

ab108400 staining Calpain 1 in the T-47D cell line by ICC/IF (Immunocytochemistry/immunofluorescence). Cells were fixed with 4% Paraformaldehyde permeabilized with 0.1% Triton X-100. Samples were incubated with primary antibody (1/70). ab150077(1/500) an Alexa Fluor[®]488-conjugated Goat anti-rabbit IgG was used as the secondary antibody. Nuclei were counterstained with DAPI.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calpain 1 antibody
[EPR3319] (ab108400)

ab108400 staining Calpain 1 in Human transitional cell carcinoma of bladder tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed and paraffin-embedded, antigen retrieval was by heat mediation in Tris/EDTA buffer pH9. Samples were incubated with primary antibody (1/200). An undiluted HRP-conjugated mouse antirabbit IgG was used as the secondary antibody. Tissue counterstained with Hematoxylin. PBS was used in the negative control rather than the Primary antibody.



Western blot - Anti-Calpain 1 antibody [EPR3319] (ab108400)

All lanes : Anti-Calpain 1 antibody [EPR3319] (ab108400) at 1/1000 dilution

Lane 1 : Mouse brain lysate

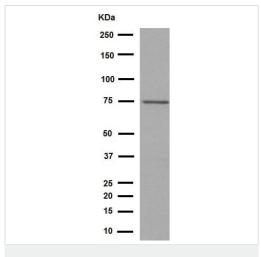
Lane 2 : Rat brain lysate

Lysates/proteins at 20 µg per lane.

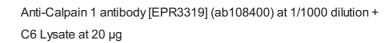
Secondary

All lanes : Goat Anti-Rabbit lgG, (H+L), HRP-conjugated at 1/1000 dilution

Predicted band size: 82 kDa



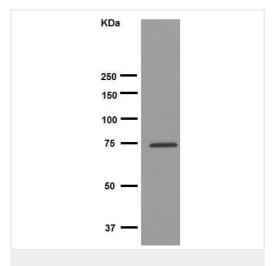
Western blot - Anti-Calpain 1 antibody [EPR3319] (ab108400)



Secondary

Goat Anti-Rabbit IgG, (H+L), HRP- conjugated at 1/1000 dilution

Predicted band size: 82 kDa



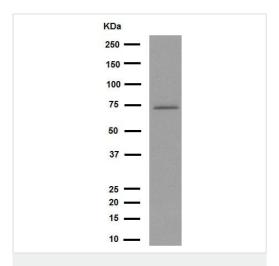
Western blot - Anti-Calpain 1 antibody [EPR3319] (ab108400)

Anti-Calpain 1 antibody [EPR3319] (ab108400) at 1/5000 dilution + T47-D Lysate at 10 µg

Secondary

Goat Anti-Rabbit IgG, (H+L), HRP- conjugated at 1/1000 dilution

Predicted band size: 82 kDa



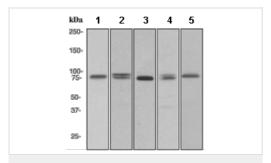
Western blot - Anti-Calpain 1 antibody [EPR3319] (ab108400)

Anti-Calpain 1 antibody [EPR3319] (ab108400) at 1/5000 dilution + Human fetal kidney lysate at 10 μg

Secondary

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Predicted band size: 82 kDa



Western blot - Anti-Calpain 1 antibody [EPR3319] (ab108400)

All lanes : Anti-Calpain 1 antibody [EPR3319] (ab108400) at 1/1000 dilution (unpurified)

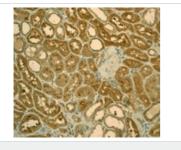
Lane 1: Human fetal kidney cell lysate

Lane 2: U937 cell lysate Lane 3: A431 cell lysate Lane 4: 293T cell lysate

Lane 5: T47D cell lysate

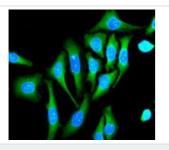
Lysates/proteins at 10 µg per lane.

Predicted band size: 82 kDa

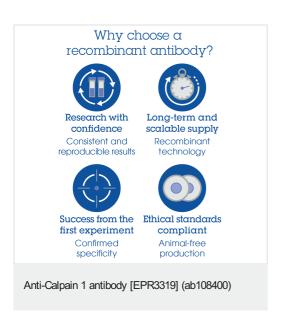


Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Calpain 1 antibody
[EPR3319] (ab108400)

ab108400, unpurified, at 1/500 dilution staining Calpain in Human kidney by Immunohistochemistry, Paraffin-embedded tissue.



Immunocytochemistry/ Immunofluorescence - Anti-Calpain 1 antibody [EPR3319] (ab108400) ab108400, unpurified, at 1/250 dilution staining Calpain in HeLa cells by Immunofluorescence.



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