

### Anti-Calpain 1 antibody [EPR3319] ab108400

KO 評価済 リコンビナント RabMAb

★★★★☆ 1 Abreviews 18 References 画像数 12

#### 製品の概要

製品名	Anti-Calpain 1 antibody [EPR3319]
製品の詳細	Rabbit monoclonal [EPR3319] to Calpain 1
由来種	Rabbit
特異性	This antibody recognises the large subunit of Calpain
アプリケーション	<b>適用あり:</b> WB, IHC-P, ICC/IF, Flow Cyt (Intra)
種交差性	<b>交差種:</b> 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	Human fetal kidney, U937, A431, (D) 293T, and T47D cell lysates; Human kidney tissue; HeLa cells.
特記事項	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</p>

#### 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	<p>pH: 7.20</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 40% Glycerol, 59% PBS, 0.05% BSA</p>
精製度	Protein A purified
ポリ/モノ	モノクローナル
クローン名	EPR3319
アイソタイプ	IgG

## アプリケーション

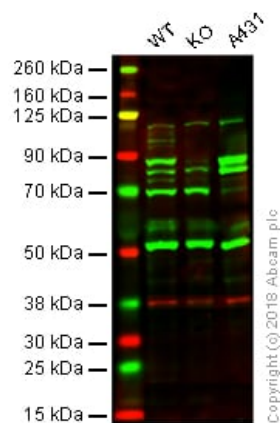
The Abpromise guarantee      **Abpromise保証は、次のテスト済みアプリケーションにおけるab108400の使用に適用されます**  
アプリケーションノートには、推奨の開始希釈率がありますが、適切な希釈率につきましてはご確認ください。

アプリケーション	Abreviews	特記事項
WB		1/1000 - 1/5000. Predicted molecular weight: 82 kDa. <b>For unpurified use at 1/1000 - 1/10000.</b>
IHC-P		1/200. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol. See <b><u>IHC antigen retrieval protocols</u></b> . <b>For unpurified use at 1/500 - 1/1000.</b>
ICC/IF		1/50. <b>For unpurified use at 1/250 - 1/500.</b>
Flow Cyt (Intra)		1/380. For unpurified use at 1/100 - 1/500. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.

## ターゲット情報

機能	Calcium-regulated non-lysosomal thiol-protease which catalyze limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.
組織特異性	Ubiquitous.
配列類似性	Belongs to the peptidase C2 family. Contains 1 calpain catalytic domain. Contains 4 EF-hand domains.
細胞内局在	Cytoplasm. Cell membrane. Translocates to the plasma membrane upon Ca(2+) binding.

## 画像



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

**All lanes :** Anti-Calpain 1 antibody [EPR3319] (ab108400)

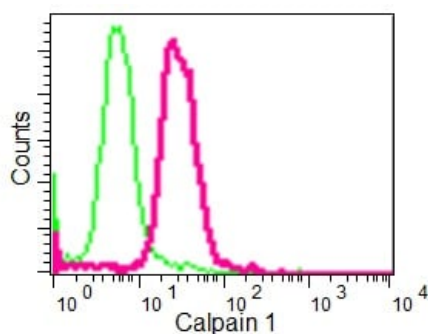
**Lane 1 :** Wild type HAP1 whole cell lysate

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

**Lane 3 :** A431 whole cell lysate

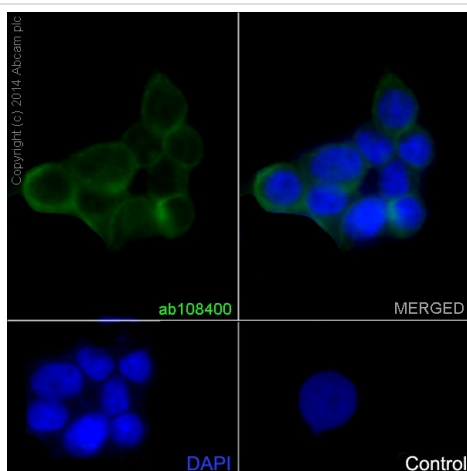
**Predicted band size:** 82 kDa

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.



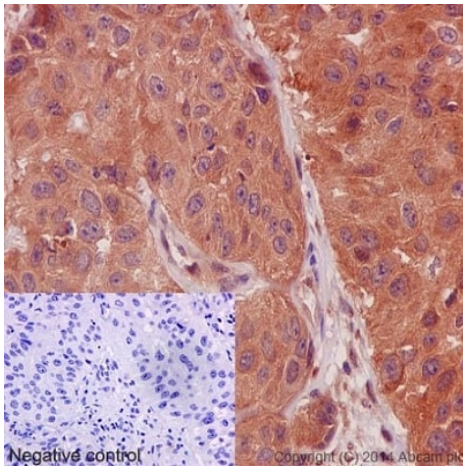
Flow Cytometry (Intracellular) - Anti-Calpain 1 antibody [EPR3319] (ab108400)

Overlay histogram showing Jurkat cells stained with ab108400 (red line) at 1/380 dilution. The cells were fixed with 2% paraformaldehyde. 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.



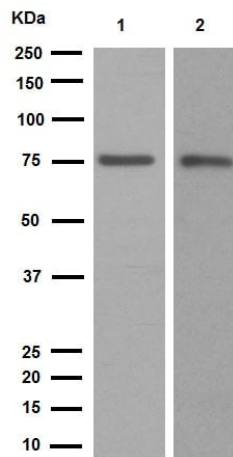
Immunocytochemistry/ Immunofluorescence - Anti-Calpain 1 antibody [EPR3319] (ab108400)

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 paraffin-embedded 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 anti-rabbit 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

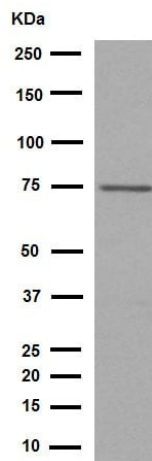
**Lane 2 :** Rat brain lysate

Lysates/proteins at 20 µg per lane.

#### Secondary

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

**Predicted band size:** 82 kDa



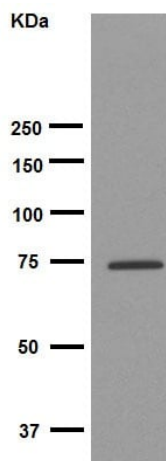
Western blot - Anti-Calpain 1 antibody [EPR3319]  
(ab108400)

Anti-Calpain 1 antibody [EPR3319] (ab108400) at 1/1000 dilution +  
C6 Lysate at 20 µg

**Secondary**

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

**Predicted band size:** 82 kDa



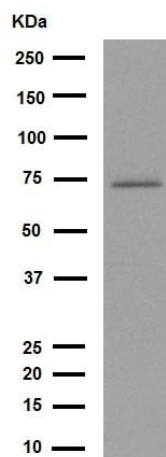
Western blot - Anti-Calpain 1 antibody [EPR3319]  
(ab108400)

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

**Secondary**

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

**Predicted band size:** 82 kDa



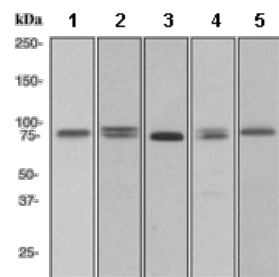
Western blot - Anti-Calpain 1 antibody [EPR3319]  
(ab108400)

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

**Secondary**

Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG 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

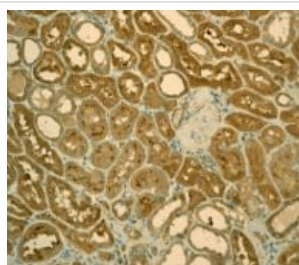
**Lane 3 :** A431 cell lysate

**Lane 4 :** 293T cell lysate

**Lane 5 :** T47D cell lysate

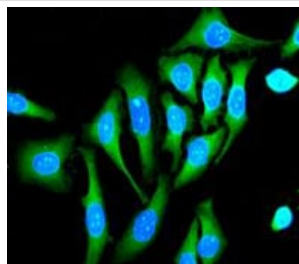
Lysates/proteins at 10 µg per lane.

**Predicted band size:** 82 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded 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.

### Why choose a recombinant antibody?



**Research with confidence**  
Consistent and reproducible results



**Long-term and scalable supply**  
Recombinant technology



**Success from the first experiment**  
Confirmed specificity



**Ethical standards compliant**  
Animal-free production

Anti-Calpain 1 antibody [EPR3319] (ab108400)

**Please note:** All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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