


### Anti-Calpain small subunit 1 antibody [EPR3323] ab92356

敲除验证
重组
RabMAb

[4 References](#)
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#### 概述

<b>产品名称</b>	Anti-Calpain small subunit 1抗体[EPR3323]
<b>描述</b>	兔单克隆抗体[EPR3323] to Calpain small subunit 1
<b>宿主</b>	Rabbit
<b>经测试应用</b>	<b>适用于:</b> WB, IHC-P <b>不适用于:</b> IP
<b>种属反应性</b>	<b>与反应:</b> Mouse, Human <b>预测可用于:</b> Rat 
<b>免疫原</b>	Synthetic peptide within Human Calpain small subunit 1 aa 50-150. The exact sequence is proprietary. Database link: <a href="#">P04632</a>
<b>阳性对照</b>	WB: Hap1 cells, HepG2 cells, HeLa cells; T47-D cell lysate, HEK293T cell lysate, A431 cell lysate, Human spleen lysate. IHC-P: human kidney.
<b>常规说明</b>	This product is a recombinant monoclonal antibody, which offers several advantages including: <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> For more information <a href="#">see here</a> .  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> .

#### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Store at -20°C. Stable for 12 months at -20°C.
<b>存储溶液</b>	pH: 7.20 Preservative: 0.05% Sodium azide Constituents: 40% Glycerol (glycerin, glycerine), 9.85% Tris glycine, 50% Tissue culture supernatant
<b>纯度</b>	Protein A purified

克隆 单克隆  
克隆编号 EPR3323  
同种型 IgG

## 应用

**The Abpromise guarantee** **Abpromise™** 承诺保证使用ab92356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 - 1/2000. 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.

应用说明 Is unsuitable for IP.

## 靶标

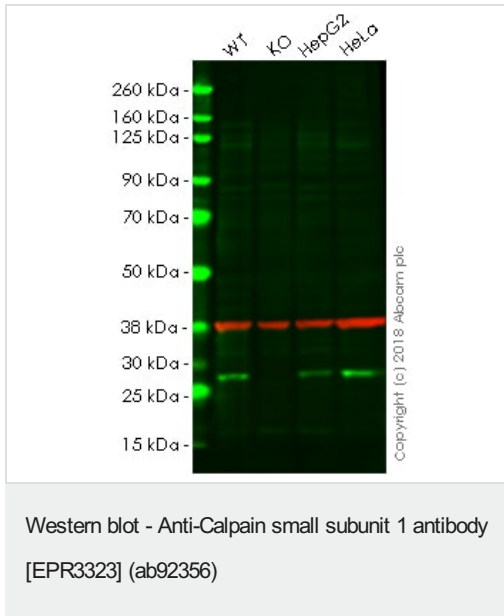
**功能** Regulatory subunit of the calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of substrates involved in cytoskeletal remodeling and signal transduction.

**序列相似性** Contains 5 EF-hand domains.

**结构域** 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.

**细胞定位** Cytoplasm. Cell membrane. Translocates to the plasma membrane upon calcium binding.

## 图片



**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

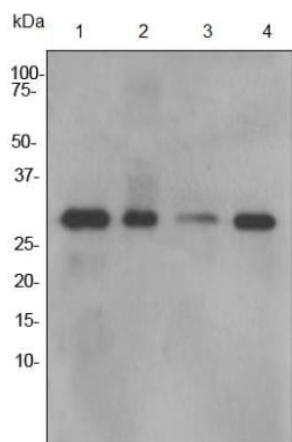
**Lane 4 :** HeLa whole cell lysate

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

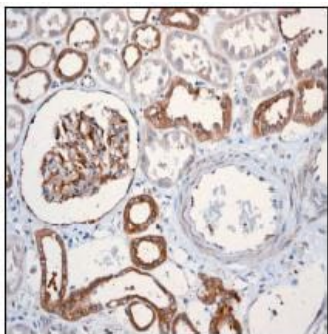
**Lane 4 :** Human spleen lysate

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 paraffin-embedded 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.

### 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 small subunit 1 antibody [EPR3323]  
(ab92356)

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

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