

### Anti-Caspase-1 antibody [EPR19672] ab207802

敲除验证
重组
RabMAb

★★★★☆
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#### 概述

<b>产品名称</b>	Anti-Caspase-1抗体[EPR19672]
<b>描述</b>	兔单克隆抗体[EPR19672] to Caspase-1
<b>宿主</b>	Rabbit
<b>经测试应用</b>	<b>适用于:</b> IP, WB
<b>种属反应性</b>	<b>与反应:</b> Human
<b>免疫原</b>	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
<b>阳性对照</b>	WB: Untreated THP-1 whole cell lysate; THP-1 treated with 80 nM TPA overnight, then treated with 1 µg/ml LPS for 8 hours whole cell lysate; Human lymph node, thymus and spleen lysates, Wild-type THP-1 cell lysate.
<b>常规说明</b>	<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>

#### 性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
<b>存储溶液</b>	<p>pH: 7.2</p> <p>Preservative: 0.01% Sodium azide</p> <p>Constituents: 59% PBS, 40% Glycerol, 0.05% BSA</p>
<b>纯度</b>	Protein A purified
<b>克隆</b>	单克隆
<b>克隆编号</b>	EPR19672

## 应用

## The Abpromise guarantee

Abpromise™承诺保证使用ab207802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
IP		1/30.
WB	★★★★★ (1)	1/1000. Detects a band of approximately 45, 42, 35, 22, 20 kDa (predicted molecular weight: 45, 42, 35, 22, 20 kDa).

## 靶标

## 功能

Thiol protease that cleaves IL-1 beta between an Asp and an Ala, releasing the mature cytokine which is involved in a variety of inflammatory processes. Important for defense against pathogens. Cleaves and activates sterol regulatory element binding proteins (SREBPs). Can also promote apoptosis.

## 组织特异性

Expressed in larger amounts in spleen and lung. Detected in liver, heart, small intestine, colon, thymus, prostate, skeletal muscle, peripheral blood leukocytes, kidney and testis. No expression in the brain.

## 序列相似性

Belongs to the peptidase C14A family.  
Contains 1 CARD domain.

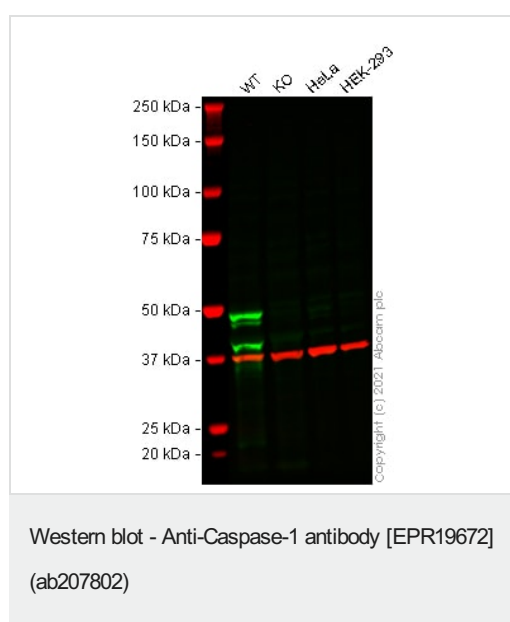
## 翻译后修饰

The two subunits are derived from the precursor sequence by an autocatalytic mechanism.

## 细胞定位

Cytoplasm.

## 图片



**All lanes** : Anti-Caspase-1 antibody [EPR19672] (ab207802) at 1/1000 dilution

**Lane 1** : Wild-type THP-1 cell lysate at 40 µg

**Lane 2** : CASP1 knockout THP-1 cell lysate at 40 µg

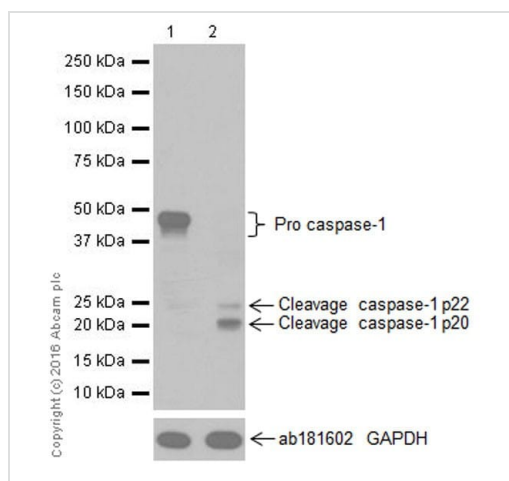
**Lane 3** : HeLa cell lysate at 20 µg

**Lane 4** : HEK-293 cell lysate at 20 µg

Performed under reducing conditions.

**Predicted band size:** 45, 42, 35, 22, 20 kDa

False colour image of Western blot: Anti-Caspase-1 antibody [EPR19672] staining at 1/1000 dilution, shown in green; Mouse anti-GAPDH antibody [6C5] ([ab8245](#)) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab207802 was shown to bind specifically to Caspase-1. A band was observed at 22, 35-40, 48 kDa in wild-type THP-1 cell lysates with no signal observed at this size in CASP1 knockout cell line [ab276116](#) (knockout cell lysate [ab277988](#)). To generate this image, wild-type and CASP1 knockout THP-1 cell lysates were analysed. First, samples were run on an SDS-PAGE gel then transferred onto a nitrocellulose membrane. Membranes were blocked in fluorescent western blot (TBS-based) blocking solution before incubation with primary antibodies overnight at 4 °C. Blots were washed four times in TBS-T, incubated with secondary antibodies for 1 h at room temperature, washed again four times then imaged. Secondary antibodies used were Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ([ab216773](#)) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ([ab216776](#)) at 1/20000 dilution.



Western blot - Anti-Caspase-1 antibody [EPR19672] (ab207802)

**All lanes :** Anti-Caspase-1 antibody [EPR19672] (ab207802) at 1/1000 dilution

**Lane 1 :** Untreated THP-1 (Human monocytic leukemia cell line) whole cell lysate

**Lane 2 :** THP-1 (Human monocytic leukemia cell line) treated with 80 nM TPA overnight, then treated with 1 µg/ml LPS for 8 hours whole cell lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) ([ab97051](#)) at 1/100000 dilution

**Predicted band size:** 45, 42, 35, 22, 20 kDa

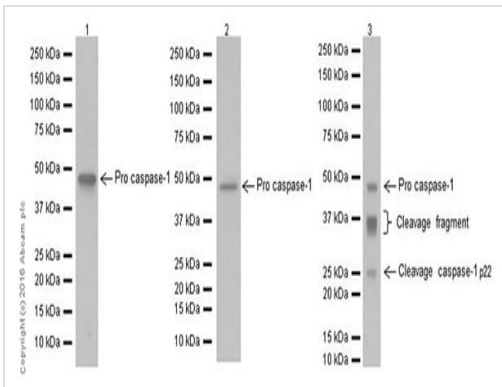
**Observed band size:** 20,22,42,45 kDa

**Exposure time:** 3 minutes

Blocking/Dilution buffer: 5% NFDm/TBST.

There are six pro-caspase 1 isoforms, generating products between 30-45kDa, Pro-Caspase 1 is cleaved into p20(p22) and

p10(p12) subunits. PMID: 8662843. PMID: 7595215. The product recognizes p20(p22) cleavage fragment where the immunogen is located.



Western blot - Anti-Caspase-1 antibody [EPR19672] (ab207802)

**All lanes :** Anti-Caspase-1 antibody [EPR19672] (ab207802) at 1/1000 dilution

**Lane 1 :** Human lymph node lysate

**Lane 2 :** Human thymus lysate

**Lane 3 :** Human spleen lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

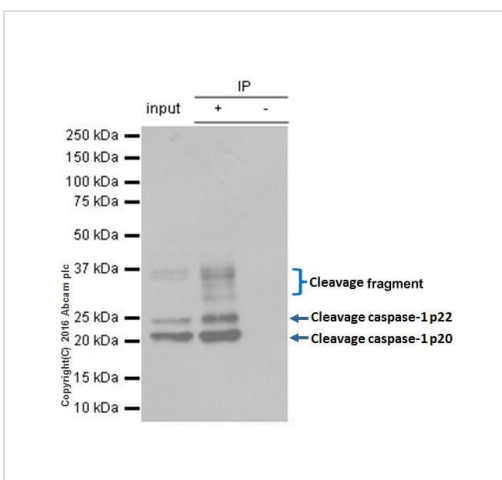
**Predicted band size:** 45, 42, 35, 22, 20 kDa

**Observed band size:** 22,35,45 kDa

**Exposure time:** 1 minute

Blocking/Dilution buffer: 5% NFDM/TBST.

Pro-Caspase 1 is cleaved into p20(p22) and p10(p12) subunits. PMID: 8662843. PMID: 7595215. The product recognizes p20(p22) cleavage fragment where the immunogen is located.



Immunoprecipitation - Anti-Caspase-1 antibody [EPR19672] (ab207802)

ab207802 Immunoprecipitating Caspase-1 in THP-1 (human acute monocytic leukemia) whole cell lysate. 2µg of capture antibody in 0.35mg lysate was used. 10µg of cell lysate was incubated with primary antibody at a dilution of 1/1000 and VeriBlot for IP Detection Reagent (HRP) **ab131366** was used for detection at a dilution of 1/1000.

**Lane 1 :** THP-1 (human acute monocytic leukemia ) whole cell lysate

**Lane 2 :** THP-1 (human acute monocytic leukemia ) whole cell lysate

**Lane 3 :** Rabbit monoclonal IgG (**ab172730**) instead of ab207802 in THP-1 (human acute monocytic leukemia ) whole cell lysate

**Blocking buffer:** 5% NFDM/TBST

**Diluting buffer:** 5% NFDM/TBST

## 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-Caspase-1 antibody [EPR19672] (ab207802)

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

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