

# Anti-Caspase-7 antibody [EPR22839-12] ab255818

敲除验证 重组 RabMAb

[3 References](#) [8 图像](#)

### 概述

产品名称	Anti-Caspase-7抗体[EPR22839-12]
描述	兔单克隆抗体[EPR22839-12] to Caspase-7
宿主	Rabbit
经测试应用	<b>适用于:</b> Flow Cyt (Intra), WB, IHC-P <b>不适用于:</b> ICC/IF or IP
种属反应性	<b>与反应:</b> Mouse, Rat, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: Untreated wild-type HAP1 whole cell lysate, Wild-type HAP1 treated with 1 M staurosporine for 3 hours whole cell lysate, C6, PC-12, RAW 264.7 whole cell lysate, Untreated HeLa, HeLa treated with 1 M staurosporine for 3 hours whole cell lysate and C2C12 lysate. IHC-P: Human, mouse and rat colon tissues. Flow Cyt (intra): HeLa and C2C12 cells.
常规说明	<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

形式	Liquid
存放说明	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.
存储溶液	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆

克隆编号 EPR22839-12  
 同种型 IgG

## 应用

**The Abpromise guarantee** **Abpromise™** 承诺保证使用 ab255818 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
Flow Cyt (Intra)		1/50.
WB		1/1000. Detects a band of approximately 35, 32, 18 kDa (predicted molecular weight: 34 kDa).
IHC-P		1/2000. Perform heat mediated antigen retrieval with Tris/EDTA buffer pH 9.0 before commencing with IHC staining protocol.

应用说明 Is unsuitable for ICC/IF or IP.

## 靶标

**功能** Involved in the activation cascade of caspases responsible for apoptosis execution. Cleaves and activates sterol regulatory element binding proteins (SREBPs). Proteolytically cleaves poly(ADP-ribose) polymerase (PARP) at a '216-Asp-Gly-217' bond. Overexpression promotes programmed cell death.

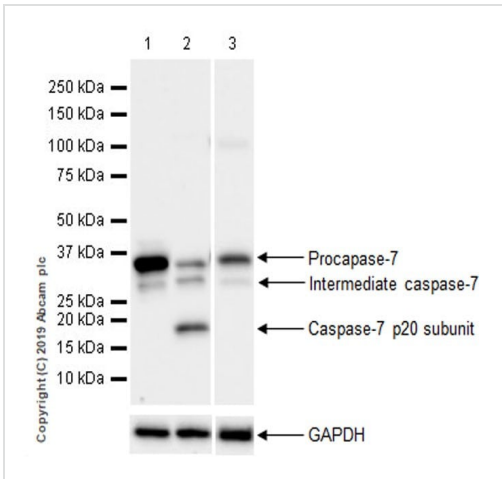
**组织特异性** Highly expressed in lung, skeletal muscle, liver, kidney, spleen and heart, and moderately in testis. No expression in the brain.

**序列相似性** Belongs to the peptidase C14A family.

**翻译后修饰** Cleavages by granzyme B or caspase-10 generate the two active subunits. Propeptide domains can also be cleaved efficiently by caspase-3. Active heterodimers between the small subunit of caspase-7 and the large subunit of caspase-3, and vice versa, also occur.

**细胞定位** Cytoplasm.

## 图片



Western blot - Anti-Caspase-7 antibody [EPR22839-12] (ab255818)

**All lanes** : Anti-Caspase-7 antibody [EPR22839-12] (ab255818) at 1/1000 dilution

**Lane 1** : Untreated HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

**Lane 2** : HeLa treated with 1  $\mu$ M staurosporine for 3 hours whole cell lysate

**Lane 3** : C2C12 (mouse myoblasts myoblast) whole cell lysate

Lysates/proteins at 20  $\mu$ g per lane.

### Secondary

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

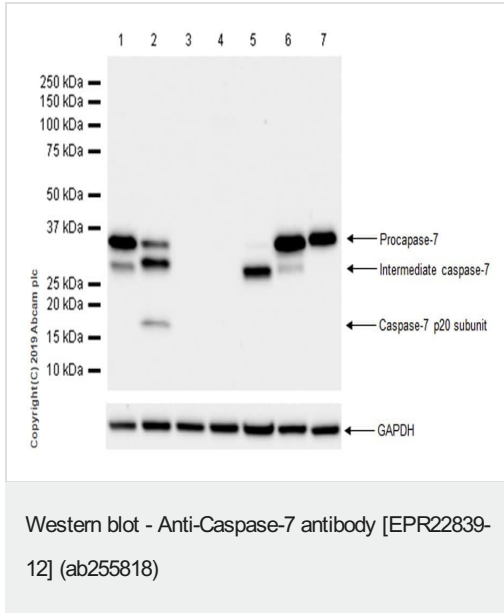
**Predicted band size:** 34 kDa

**Observed band size:** 18,32,35 kDa

Caspase-7 is activated upon apoptotic induction. Procapase-7 (35 kDa), intermediate caspase-7 (32 kDa) and caspase-7 p20 subunit (18 kDa) are observed. The molecular weight observed is consistent with what has been described in the literature (PMID: 15953353, 18596415).

Exposure time: Lanes 1-2: 15 seconds; Lane 3: 3 seconds.

Blocking and Diluting Buffer and concentration: 5% NFDm/TBST.



**All lanes** : Anti-Caspase-7 antibody [EPR22839-12] (ab255818) at 1/1000 dilution

**Lane 1** : Untreated wild-type HAP1 whole cell lysate

**Lane 2** : Wild-type HAP1 treated with 1  $\mu$ M staurosporine for 3 hours whole cell lysate

**Lane 3** : Untreated caspase-7 knockout HAP1 whole cell lysate

**Lane 4** : Caspase-7 knockout HAP1 treated with 1  $\mu$ M staurosporine for 3 hours whole cell lysate

**Lane 5** : C6 (rat glial tumor glial cell) whole cell lysate

**Lane 6** : PC-12 (rat adrenal gland pheochromocytoma) whole cell lysate

**Lane 7** : RAW 264.7 (mouse abelson murine leukemia virus-induced tumor macrophage) whole cell lysate

Lysates/proteins at 20  $\mu$ g per lane.

## Secondary

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

**Predicted band size:** 34 kDa

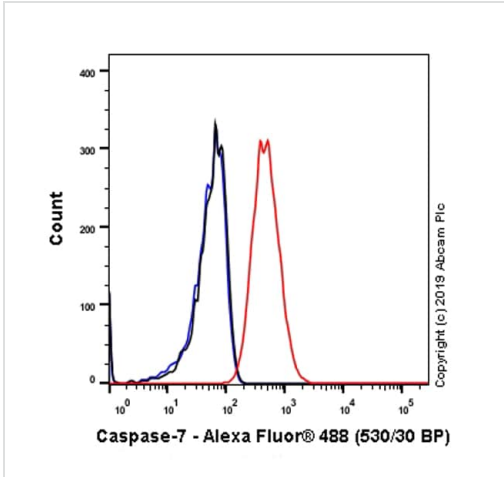
**Observed band size:** 32,35 kDa

**Exposure time:** 26 seconds

Caspase-7 is activated upon apoptotic induction. Procaspase-7 (35 kDa), intermediate caspase-7 (32 kDa) and caspase-7 p20 subunit (18 kDa) are observed. The molecular weight observed is consistent with what has been described in the literature (PMID: 15953353, 18596415).

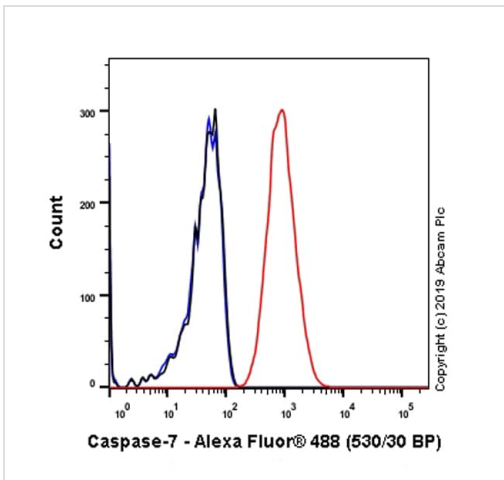
ab255818 was shown to specifically react with Caspase-7 in wild-type HAP1 cells as signal was lost in Caspase-7 knockout cells. Wild-type and Caspase-7 knockout samples were subjected to SDS-PAGE. ab255818 and [ab181602](#) (Rabbit anti-GAPDH loading control) were incubated 1 hour at room temperature at

1/1000 dilution and 1/200,000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) secondary antibody at 1/100,000 dilution for 1 hour at room temperature before imaging. The blot was developed on a BIO-RAD<sup>®</sup> ChemiDoc<sup>™</sup> instrument using the ECL technique. Blocking and Diluting Buffer and concentration: 5% NFD/MTBST



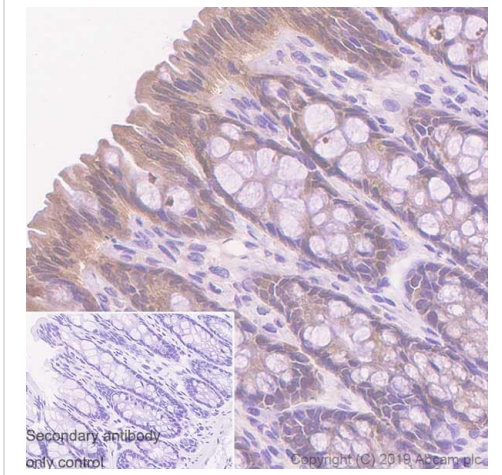
Flow Cytometry (Intracellular) - Anti-Caspase-7 antibody [EPR22839-12] (ab255818)

Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized C2C12 (mouse muscle) cells labeling Caspase-7 with ab255818 at 1/50 (Red) compared with a Rabbit monoclonal IgG (**ab172730**) / Black isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



Flow Cytometry (Intracellular) - Anti-Caspase-7 antibody [EPR22839-12] (ab255818)

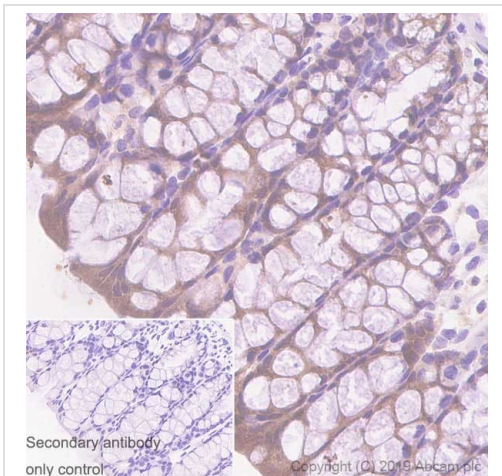
Intracellular flow cytometric analysis of 4% paraformaldehyde fixed, 90% methanol permeabilized HeLa (human cervix adenocarcinoma) cells labeling Caspase-7 with ab255818 at 1/50 (Red) compared with a Rabbit monoclonal IgG (**ab172730**) / Black isotype control and an unlabeled control (cells without incubation with primary antibody and secondary antibody) (Blue). A Goat anti rabbit IgG (Alexa Fluor<sup>®</sup> 488, **ab150077**) at 1/2000 dilution was used as the secondary antibody.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspase-7 antibody [EPR22839-12] (ab255818)

Immunohistochemical analysis of paraffin-embedded rat colon tissue labeling Caspase-7 with ab255818 at 1/2000 dilution (0.28 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on rat colon (PMID: 30448733) is observed. The section was incubated with ab255818 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

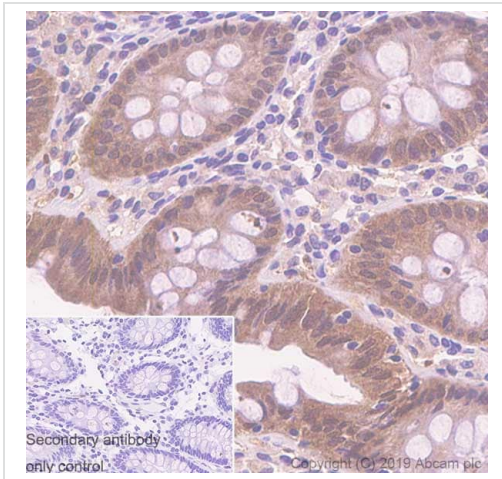
Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspase-7 antibody [EPR22839-12] (ab255818)

Immunohistochemical analysis of paraffin-embedded mouse colon tissue labeling Caspase-7 with ab255818 at 1/2000 dilution (0.28 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on mouse colon (PMID: 23572575) is observed. The section was incubated with ab255818 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND® RX instrument. Counterstained with hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control: Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).




Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspase-7 antibody [EPR22839-12] (ab255818)

Immunohistochemical analysis of paraffin-embedded human colon tissue labeling Caspase-7 with ab255818 at 1/2000 dilution (0.28 ug/ml) followed by a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**). Positive staining on human colon (PMID: 30448733) is observed. The section was incubated with ab255818 for 15 mins at room temperature. The immunostaining was performed on a Leica Biosystems BOND<sup>®</sup> RX instrument. Counterstained with hematoxylin. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0, epitope retrieval solution 2) for 20 mins.

Secondary antibody only control/ Used PBS instead of primary antibody, secondary antibody is a ready to use Rabbit specific IHC polymer detection kit HRP/DAB (**ab209101**).

Why choose a recombinant antibody?

 <p><b>Research with confidence</b> Consistent and reproducible results</p>	 <p><b>Long-term and scalable supply</b> Recombinant technology</p>
 <p><b>Success from the first experiment</b> Confirmed specificity</p>	 <p><b>Ethical standards compliant</b> Animal-free production</p>

Anti-Caspase-7 antibody [EPR22839-12] (ab255818)

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

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