# abcam

#### Product datasheet

## Anti-Caspase-7 antibody [E22] ab32522



RabMAb

★★★★★ 2 Abreviews 24 References 7 图像

概述

产**品名称** Anti-Caspase-7抗体[E22]

描述 兔单克隆抗体[E22] to Caspase-7

**宿主** Rabbit

特异性 The antibody should recognize both pro-form and p20 cleaved-form. The antibody does not cross-

react with other Caspase family members.

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

种属反应性 与反应: Human

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

阳性对照 WB: Jurkat and HeLa whole cell lysate (ab150035). IHC-P: Human skin cancer tissue. ICC/IF:

HeLa cells. Flow Cyt (intra): HeLa cells. IP: Jurkat cell lysates

常规说明 Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit

monoclonal antibodies. For details on our patents, please refer to **RabMAb**® **patents**.

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets

your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be

found below, along with publications, customer reviews and Q&As

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

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.

Avoid freeze / thaw cycle.

**存储溶液** pH: 7.20

Preservative: 0.01% Sodium azide

1

Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA

纯**度** Protein A purified

 克隆
 单克隆

 克隆编号
 E22

 同种型
 IgG

#### 应用

### The Abpromise guarantee Abpromise™承诺保证使用ab32522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)	1/1000. Detects a band of approximately 34 kDa (predicted molecular weight: 34 kDa).
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
ICC/IF		1/100.
IP	<b>★★★</b> ☆☆ (1)	1/20.
Flow Cyt (Intra)		1/250.

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-AspGly-217' bond. Overexpression promotes programmed cell death.
组织 <b>特异性</b>	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 [E22] (ab32522)

**All lanes :** Anti-Caspase-7 antibody [E22] (ab32522) at 1/1000 dilution

Lane 1: Wild-type HeLa cell lysate

Lane 2: CASP7 knockout HeLa cell lysate

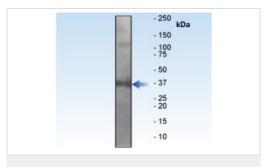
Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

**Predicted band size:** 34 kDa **Observed band size:** 38 kDa

**Lanes 1-2:** Merged signal (red and green). Green - ab32522 observed at 38 kDa. Red - Anti-alpha Tubulin antibody [DM1A] - Loading Control (ab7291) observed at 50 kDa.

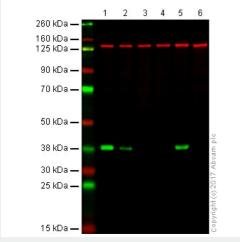
ab32522 was shown to react with pro Caspase-7 in wild-type HeLa cells in western blot. Loss of signal was observed when knockout cell line <a href="mailto:ab265777">ab265777</a> (knockout cell lysate <a href="mailto:ab257380">ab257380</a>) was used. Wild-type HeLa and CASP7 knockout HeLa cell lysates were subjected to SDS-PAGE. ab32522 and Anti-alpha Tubulin antibody [DM1A] - Loading Control (<a href="mailto:ab7291">ab7291</a>) overnight at 4°C at a 1 in 1000 dilution and a 1 in 20000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye®800CW) preadsorbed (<a href="mailto:ab216773">ab216773</a>) and Goat anti-Mouse IgG H&L (IRDye®680RD) preadsorbed (<a href="mailto:ab216776">ab216776</a>) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Caspase-7 antibody [E22] (ab32522)

Anti-Caspase-7 antibody [E22] (ab32522) at 1/1000 dilution + Jurkat cell lysate

**Predicted band size:** 34 kDa **Observed band size:** 34 kDa



Western blot - Anti-Caspase-7 antibody [E22] (ab32522)



lysate (20 µg)

 $(20 \mu g)$ 

observed at 38 kDa. Red - loading control, ab18058, observed at 130 kDa.

Lane 5: HeLa whole cell lysate (20 µg)

Lane 1: Wild type HAP1 whole cell lysate (20 µg)

Lane 2: Wild type HAP1 + Staurosporine ab120056 whole cell

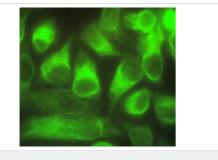
Lane 4: CASP7 + Staurosporine knockout HAP1 whole cell lysate

Lane 3: CASP7 knockout HAP1 whole cell lysate (20 µg)

Lane 6: HeLa + Staurosporine whole cell lysate (20 µg)

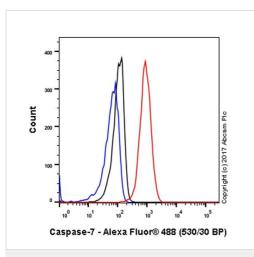
Lanes 1 - 6: Merged signal (red and green). Green - ab32522

ab32522 was shown to specifically react with HAP1 + Staurosporine when HAP1 + Staurosporine knockout samples were used. Wild-type and HAP1 + Staurosporine knockout samples were subjected to SDS-PAGE. Ab32522 and ab18058 (Mouse anti Vinculin loading control) were incubated overnight at 4°C at 1000 dilution and 1/10000 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.



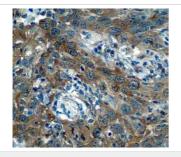
Immunocytochemistry/ Immunofluorescence - Anti-Caspase-7 antibody [E22] (ab32522)

Immunofluorescent staining of HeLa cells using ab32522 at 1:100 dilution.



Flow Cytometry (Intracellular) - Anti-Caspase-7 antibody [E22] (ab32522)

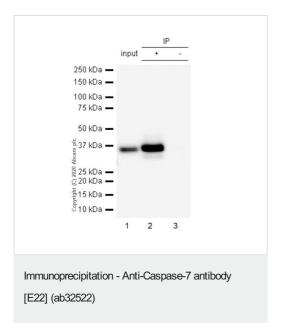
Intracellular Flow Cytometry analysis of HeLa (human cervix adenocarcinoma) cells labeling Caspase-7 (red) with ab32522 at a 1/250 dilution. Cells were fixed with 4% paraformaldehyde and permeabilized with 90% methanol. A goat anti-rabbit lgG (Alexa Fluorr<sup>®</sup> 488) (ab150077) was used as the secondary antibody at a 1/2000 dilution. Black - Rabbit monoclonal lgG (ab172730). Blue (unlabeled control) - Cells without incubation with the primary and secondary antibodies.



Immunohistochemistry (Formalin/PFA-fixed paraffinembedded sections) - Anti-Caspase-7 antibody
[E22] (ab32522)

Immunohistochemical analysis of paraffin embedded human skin cancer tissue using ab32522 at 1:50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Purified ab32522 at 1/20 dilution (1 $\mu$ g) immunoprecipitating

Caspase-7 in Jurkat whole cell lysate.

Lane 1 (input): Jurkat (Human T cell leukemia T lymphocyte) whole

cell lysate 10µg

Lane 2 (+): ab32522 + Jurkat whole cell lysate.

Lane 3 (-): Rabbit monoclonal IgG (ab172730) instead of ab32522

in Jurkat whole cell lysate.

VeriBlot for IP Detection Reagent (HRP) (ab131366) (1/1000

dilution) was used for Western blotting.

Blocking Buffer and concentration: 5% NFDM/TBST.

Diluting buffer and concentration: 5% NFDM/TBST.

Observed band size: 34 kDa

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