abcam

Product datasheet

Anti-Caspase-9 antibody [EPR18108] ab185719

敲除验证 重组 RabMAb

8 References 9 图像

概述

产品名称	Anti-Caspase-9抗体[EPR18108]
描述	兔单克隆抗体[EPR18108] to Caspase-9
宿主	Rabbit
经测试应用	**适用于:** WB, IP
种属反应性	**与反应:** Mouse, Human
免疫原	Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa whole cell lysates untreated and treated with staurosporine 1uM for 4 hours; NIH/3T3 whole cell lysates untreated and treated with staurosporine1uM for 4 hours; Human fetal brain, fetal heart, fetal kidney and fetal liver and pancreas lysates; Mouse heart and kidney lysates. IP: HeLa whole cell lysate treated with staurosporine 1uM for 4 hours.
常规说明	This product is a recombinant monoclonal antibody, which offers several advantages including: - High batch-to-batch consistency and reproducibility - Improved sensitivity and specificity - Long-term security of supply - Animal-free production For more information **see here**. Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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: 59% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
纯度	Protein A purified
克隆	单克隆
克隆编号	EPR18108

同种型	IgG

应用

The Abpromise guarantee **Abpromise™承诺保证使用**ab185719**于以下的**经测试应用

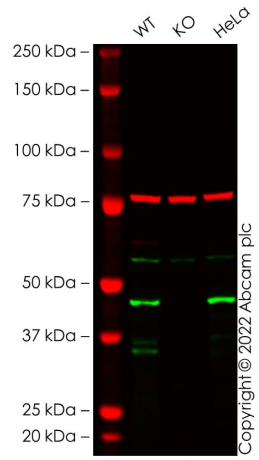
"应用说明"部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
WB		1/1000. Detects a band of approximately 46, 37, 35 kDa (predicted molecular weight: 46 kDa).
IP		1/40.

靶标

功能	Involved in the activation cascade of caspases responsible for apoptosis execution. Binding of caspase-9 to Apaf-1 leads to activation of the protease which then cleaves and activates caspase-3. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP). Isoform 2 lacks activity is an dominant-negative inhibitor of caspase-9.
组织特异性	Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.
序列相似性	Belongs to the peptidase C14A family. Contains 1 CARD domain.
发展阶段	Expressed at low levels in fetal heart, at moderate levels in neonate heart, and at high levels in adult heart.
翻译后修饰	Cleavages at Asp-315 by granzyme B and at Asp-330 by caspase-3 generate the two active subunits. Caspase-8 and -10 can also be involved in these processing events.

图片



Western blot - Anti-Caspase-9 antibody [EPR18108] (ab185719)

All lanes : Anti-Caspase-9 antibody [EPR18108] (ab185719) at 1/1000 dilution

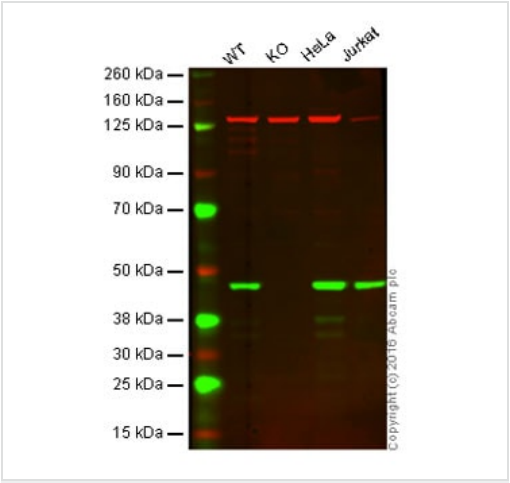
Lane 1 : Wild-type THP-1 cell lysate
Lane 2 : CASP9 knockout THP-1 cell lysate
Lane 3 : HeLa cell lysate

Lysates/proteins at 20 µg per lane.

Performed under reducing conditions.

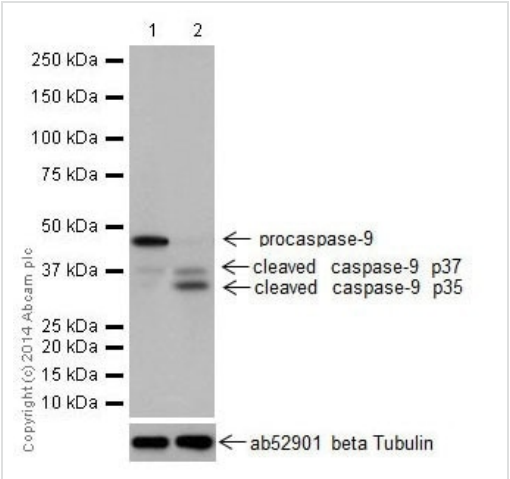
Predicted band size: 46 kDa
Observed band size: 45 kDa

False colour image of Western blot: Anti-Caspase-9 antibody [EPR18108] staining at 1/1000 dilution, shown in green; Mouse anti-CANX [CANX/1543] (**ab238078**) loading control staining at 1/20000 dilution, shown in red. In Western blot, ab185719 was shown to bind specifically to Caspase-9. A band was observed at 45 kDa in wild-type THP-1 cell lysates with no signal observed at this size in CASP9 knockout cell line **ab276122** (knockout cell lysate **ab284219**). To generate this image, wild-type and CASP9 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 3 % milk in TBS-0.1 % Tween® 20 (TBS-T) 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-9 antibody [EPR18108] (ab185719)

Lane 1: Wild-type HAP1 cell lysate (20 µg)
Lane 2: Caspase-9 knockout HAP1 cell lysate (20 µg)
Lane 3: HeLa cell lysate (20 µg)
Lane 4: Jurkat cell lysate (20 µg)
Lanes 1 - 4: Merged signal (red and green). Green - ab185719 observed at 46 kDa. Red - loading control, **ab8245**, observed at 37 kDa.
ab185719 was shown to specifically react with Caspase-9 when Caspase-9 knockout samples were used. Wild-type and Caspase-9 knockout samples were subjected to SDS-PAGE. ab185719 and **ab8245** (loading control to GAPDH) were diluted at 1/1000 and 1/10000 respectively and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.



Western blot - Anti-Caspase-9 antibody [EPR18108] (ab185719)

All lanes : Anti-Caspase-9 antibody [EPR18108] (ab185719) at 1/10000 dilution

Lane 1 : Untreated HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate
Lane 2 : HeLa whole cell lysate treated with staurosporine 1uM for 4 hours

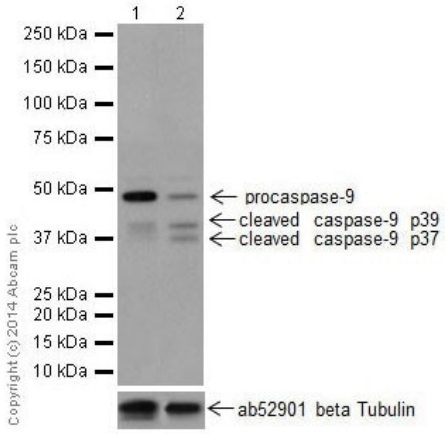
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 46 kDa
Observed band size: 35,37,46 kDa

Exposure time: 10 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Caspase-9 antibody [EPR18108] (ab185719)

All lanes : Anti-Caspase-9 antibody [EPR18108] (ab185719) at 1/2500 dilution

Lane 1 : Untreated NIH/3T3 (Mouse embyro fibroblast cells) whole cell lysate
Lane 2 : NIH/3T3 whole cell lysate treated with staurosporine 1uM for 4 hours

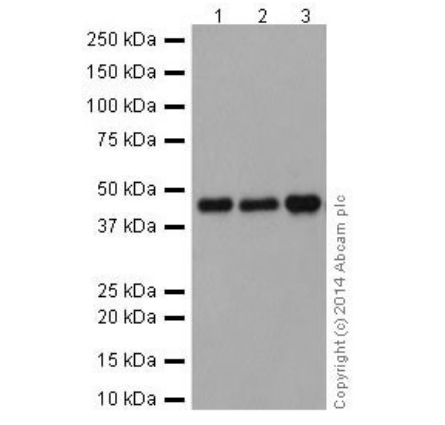
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Peroxidase-conjugated goat anti-rabbit IgG (H+L) at 1/1000 dilution

Predicted band size: 46 kDa
Observed band size: 37,39,49 kDa

Exposure time: 30 seconds

Blocking and dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Caspase-9 antibody [EPR18108] (ab185719)

All lanes : Anti-Caspase-9 antibody [EPR18108] (ab185719) at 1/1000 dilution

Lane 1 : Human fetal brain lysate
Lane 2 : Human fetal heart lysate
Lane 3 : Human fetal kidney lysate

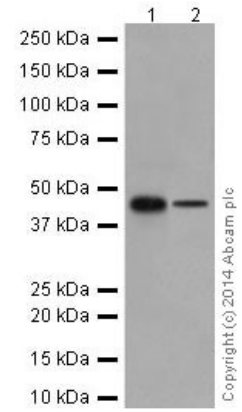
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 46 kDa
Observed band size: 46 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Caspase-9 antibody [EPR18108] (ab185719)

All lanes : Anti-Caspase-9 antibody [EPR18108] (ab185719) at 1/5000 dilution

Lane 1 : Human pancreas tissue lysate
Lane 2 : Human fetal liver tissue lysate

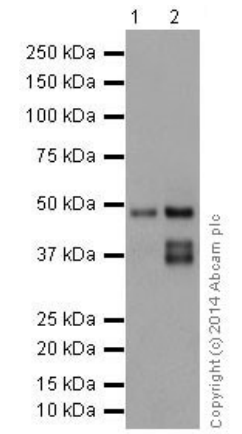
Lysates/proteins at 10 µg per lane.

Secondary
All lanes : Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG at 1/1000 dilution

Predicted band size: 46 kDa
Observed band size: 46 kDa

Exposure time: 30 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



Western blot - Anti-Caspase-9 antibody [EPR18108] (ab185719)

All lanes : Anti-Caspase-9 antibody [EPR18108] (ab185719) at 1/1000 dilution

Lane 1 : Mouse heart tissue lysate
Lane 2 : Mouse kidney tissue lysate

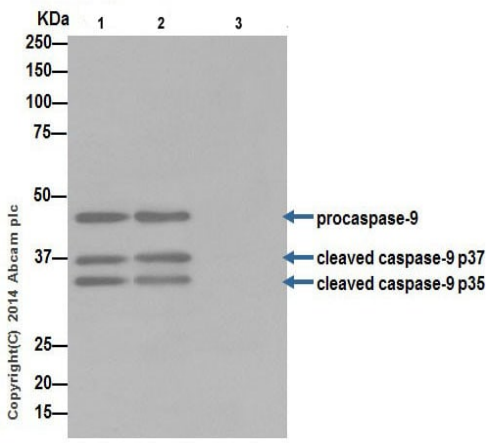
Lysates/proteins at 10 µg per lane.

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

Predicted band size: 46 kDa
Observed band size: 37,39,49 kDa

Exposure time: 15 seconds

Blocking/Dilution buffer: 5% NFDM/TBST.



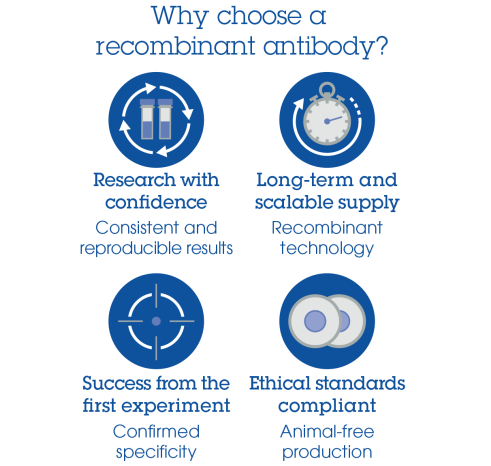
Immunoprecipitation - Anti-Caspase-9 antibody [EPR18108] (ab185719)

Caspase-9 was immunoprecipitated from 1mg of HeLa (Human epithelial cells from cervix adenocarcinoma) whole cell lysate treated with staurosporine 1uM for 4 hours with ab185719 at 1/40 dilution. Western blot was performed from the immunoprecipitate using ab185719 at 1/1000 dilution. Anti-Rabbit IgG (HRP), specific to the non-reduced form of IgG, was used as secondary antibody at 1/1500 dilution.

Lane 1: HeLa whole cell lysate treated with staurosporine 10 µg (Input).

Lane 2: ab185719 IP in HeLa whole cell lysate treated with staurosporine.

Lane 3: Rabbit monoclonal IgG (**ab172730**) instead of ab185719 in HeLa whole cell lysate treated with staurosporine.
Blocking and dilution buffer and concentration: 5% NFDM/TBST.



Anti-Caspase-9 antibody [EPR18108] (ab185719)

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