# abcam

# Product datasheet

# Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883] ab179515

Recombinant RabMAb

#### Overview

**Product name** Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883]

**Description** Rabbit monoclonal [EPR16883] to pro Caspase-1 + p10 + p12

Host species Rabbit

**Specificity** This antibody has low affinity in Ms/Rt brain, H1299 and A549

Tested applications Suitable for: WB, IP

**Species reactivity** Reacts with: Mouse, Rat, Human

**Immunogen** Recombinant fragment. This information is proprietary to Abcam and/or its suppliers.

 $\begin{tabular}{ll} \textbf{Positive control} & \textbf{WB: Untreated THP-1 and treated with 80nM TPA overnight, then treated with 1 $\mu$g/ml LPS for 8} \\ \end{tabular}$ 

hours whole cell lysates; Rat lung and spleen lysates; Human fetal lung lysates; J774A.1 and RAW 264.7 whole cell lysates. Mouse and rat brain lysates, A549 cells, NCI-H1299 cells. IP: RAW

264.7 whole cell lysate.

**General notes**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<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb**<sup>®</sup> **patents**.

## **Properties**

Form Liquid

**Storage instructions** 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.

**Storage buffer** Preservative: 0.01% Sodium azide

Constituents: PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

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Clonality Monoclonal
Clone number EPR16883

**Isotype** IgG

#### **Applications**

The Abpromise guarantee Our Abpromise guarantee covers the use of ab179515 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

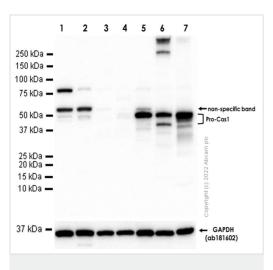
Application	Abreviews	Notes
WB	* * * * * <u>(2)</u>	1/1000. Detects a band of approximately 45, 42, 35, 12, 10 kDa (predicted molecular weight: 45, 42, 35, 12, 10 kDa).
IP		1/100.

#### **Target**

**Cellular localization** 

Cytoplasmic

#### **Images**



Western blot - Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883] (ab179515) **All lanes :** Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883] (ab179515) at 1/1000 dilution

Lane 1: Mouse brain lysate

Lane 2: Rat brain lysate

Lane 3 : NCI-H1299 (Human lung carcinoma epithelial cell) whole cell lysate

Lane 4: A549 (Human lung carcinoma epithelial cell) whole cell

lysate

Lane 5: RAW264.7 (mouse Abelson murine leukemia virus-

induced tumor macrophage) whole cell lysate

Lane 6: Mouse spleen lysate

Lane 7: Rat spleen lysate

Lysates/proteins at 20 µg per lane.

#### **Secondary**

All lanes: Goat Anti-Rabbit lgG H&L (HRP) (ab97051) at 1/20000

dilution

Predicted band size: 45, 42, 35, 12, 10 kDa

Observed band size: 53 kDa

Blocking and diluting buffer: 5% NFDM/TBST

Exposure time: 7 seconds

ab179515 has low affinity in Ms/Rt brain,H1299 and A549

**All lanes**: Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883] (ab179515) 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 80nM TPA overnight, then treated with 1  $\mu$ g/ml LPS for 8 hours whole cell lysate

Lysates/proteins at 10 µg per lane.

1 2
250 kDa —
150 kDa —
100 kDa —
75 kDa —
37 kDa —
37 kDa —
37 kDa —
40 25 kDa —
40 20 kD

Western blot - Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883] (ab179515)

#### Secondary

**All lanes :** Goat Anti-Rabbit lgG H&L (HRP) (<u>ab97051</u>) at 1/100000 dilution

**Predicted band size:** 45, 42, 35, 12, 10 kDa **Observed band size:** 10,12,35,42,45 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 and p10(p12) subunits. PMID: 8662843. The product recognizes p10(p12) cleavage fragment where the immunogen is located.



Western blot - Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883] (ab179515)

**All lanes :** Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883] (ab179515) at 1/1000 dilution

Lane 1: Rat lung lysate

Lane 2: Human fetal lung lysate

Lane 3: J774A.1 (Mouse macrophage reticulum cell sarcoma cell

line) whole cell lysate

Lane 4: Rat spleen lysate

Lane 5: RAW 264.7 (Mouse macrophage cell line transformed

with Abelson murine leukemia virus) whole cell lysate

Lysates/proteins at 20 µg per lane.

### Secondary

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

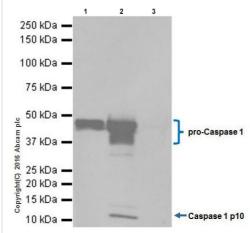
Predicted band size: 45, 42, 35, 12, 10 kDa

Observed band size: 42,45 kDa

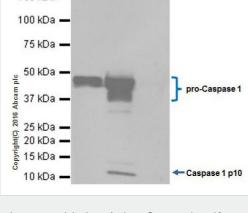
Blocking/Dilution buffer: 5% NFDM/TBST.

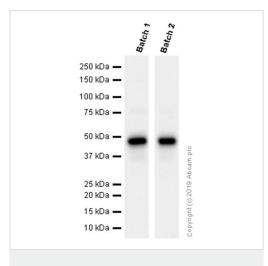
Exposure time: Lane 1: 30 seconds; Lane 2,3 and 4: 10 seconds;

Lane 5: 8 seconds.



Immunoprecipitation - Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883] (ab179515)





Western blot - Anti-pro Caspase-1 + p10 + p12 antibody [EPR16883] (ab179515)

pro Caspase1 + p10 + p12 was immunoprecipitated from 1mg of RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate with ab179515 at 1/100 dilution.

Western blot was performed from the immunoprecipitate using ab179515 at 1/1000 dilution.

VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

Lane 1: RAW 264.7 whole cell lysate, 10µg (Input).

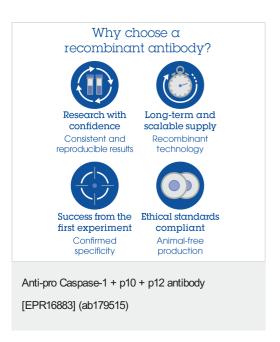
Lane 2: ab179515 IP in RAW 264.7 whole cell lysate.

Lane 3: Rabbit lgG,monoclonal [EPR25A] - Isotype Control (ab172730) instead of ab179515 in RAW 264.7 whole cell lysate.

Blocking and dilution buffer and concentration: 5% NFDM/TBST.

Exposure time: 10 seconds.

Different batches of ab179515 were tested on RAW 264.7 (Mouse Abelson murine leukemia virus-induced tumor macrophage) lysate at 1.7 µg/ml. 15 µg of lysate was loaded in each lane. Bands observed at 42,45 kDa.



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

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- Extensive multi-media technical resources to help you
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