# abcam

# Product datasheet

# Anti-Caspase-11 antibody [EPR18628] ab180673



#### Overview

**Product name** Anti-Caspase-11 antibody [EPR18628]

**Description** Rabbit monoclonal [EPR18628] to Caspase-11

Host species Rabbit

Tested applications

Suitable for: WB, IP

Species reactivity

Reacts with: Mouse

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

Positive control WB: Untreated and treated with Lipopolysaccharide 10µg/ml for 8 hours RAW 264.7 whole cell

lysate; YAC-1 and bEnd.3 whole cell lysates. IP: RAW 264.7 treated with Lipopolysaccharide

10µg/ml for 8 hours 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 specificityLong-term security of supplyAnimal-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: 59% PBS, 40% Glycerol, 0.05% BSA

Purity Protein A purified

Clonality Monoclonal
Clone number EPR18628

**Isotype** IgG

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#### **Applications**

#### The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab180673 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	<b>★★★★ (1)</b>	1/1000. Detects a band of approximately 43, 35, 30 kDa (predicted molecular weight: 43 kDa).
IP		1/50.

#### **Target**

Function Involved in ER-stress induced apoptosis. Cleaves caspase-1 (By similarity). Involved in the

activation cascade of caspases responsible for apoptosis execution. Promotes IL-1 beta

processing by ICE, so may also have a role in inflammatory responses.

Tissue specificity Mostly expressed in lung and spleen; weaker in heart and lung; little in liver, skeletal muscle,

kidney and testis. Not found in the brain.

**Sequence similarities**Belongs to the peptidase C14A family.

Contains 1 CARD domain.

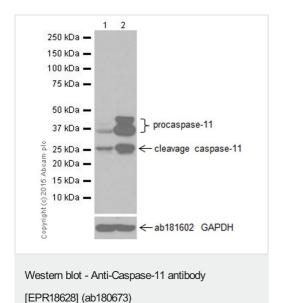
Post-translational

modifications

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

**Cellular localization** Endoplasmic reticulum membrane. Mitochondrion.

#### **Images**



**All lanes :** Anti-Caspase-11 antibody [EPR18628] (ab180673) at 1/1000 dilution

**Lane 1 :** Untreated RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) whole cell lysate

**Lane 2**: RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) treated with

Lipopolysaccharide 10µg/ml for 8 hours whole cell lysate

Lysates/proteins at 10  $\mu g$  per lane.

#### Secondary

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

Predicted band size: 43 kDa

Observed band size: 25,35,43 kDa

Exposure time: 3 minutes

Blocking/Dilution buffer: 5% NFDM/TBST.

**All lanes :** Anti-Caspase-11 antibody [EPR18628] (ab180673) at 1/1000 dilution

Lane 1 : YAC-1 (Mouse lymphoma cell line) whole cell lysate

Lane 2 : bEnd.3 (Mouse brain endothelioma cell line) whole cell lysate

Lysates/proteins at 10 µg per lane.

# **Secondary**

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

Predicted band size: 43 kDa

Observed band size: 25,35,43 kDa

Blocking/Dilution buffer: 5% NFDM/TBST.

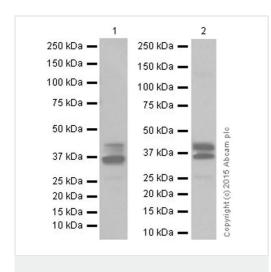
Exposure time: Lane 1: 15 seconds; Lane 2: 3 minutes.

Caspase-11 was immunoprecipitated from 1mg of RAW 264.7 (Mouse macrophage cell line transformed with Abelson murine leukemia virus) treated with Lipopolysaccharide 10µg/ml for 8 hours whole cell lysate with ab180673 at 1/50 dilution. Western blot was performed from the immunoprecipitate using ab180673 at 1/1000 dilution. VeriBlot for IP Detection Reagent (HRP) (ab131366), was used for detection at 1/10000 dilution.

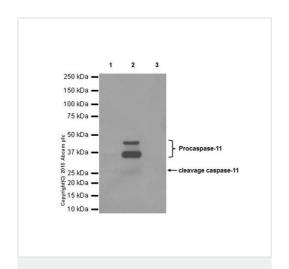
Lane 1: RAW 264.7 treated with Lipopolysaccharide  $10\mu g/ml$  for 8 hours whole cell lysate,  $10\mu g$  (lnput).

Lane 2: ab180673 IP in RAW 264.7 treated with Lipopolysaccharide 10µg/ml for 8 hours whole cell lysate.

Lane 3: Rabbit IgG,monoclonal [EPR25A] - Isotype Control (ab172730) instead of ab180673 in RAW 264.7 treated with Lipopolysaccharide 10µg/ml for 8 hours whole cell lysate.



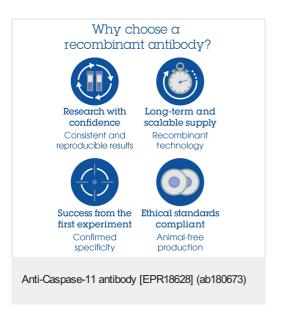
Western blot - Anti-Caspase-11 antibody [EPR18628] (ab180673)



Immunoprecipitation - Anti-Caspase-11 antibody [EPR18628] (ab180673)

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

Exposure time: 3 minutes.



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

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