# abcam

# Product datasheet

# Anti-Caspase-2 antibody [EPR16796] - BSA and Azide free ab240217





RabMAb

# 5 Images

#### Overview

Product name Anti-Caspase-2 antibody [EPR16796] - BSA and Azide free

**Description** Rabbit monoclonal [EPR16796] to Caspase-2 - BSA and Azide free

Host species Rabbit

Tested applications Suitable for: WB

Species reactivity Reacts with: Mouse, Rat, Human

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

**General notes** ab240217 is the carrier-free version of **ab179520**.

Our <u>carrier-free</u> antibodies are typically supplied in a PBS-only formulation, purified and free of BSA, sodium azide and glycerol. The carrier-free buffer and high concentration allow for increased conjugation efficiency.

This conjugation-ready format is designed for use with fluorochromes, metal isotopes, oligonucleotides, and enzymes, which makes them ideal for antibody labelling, functional and cell-based assays, flow-based assays (e.g. mass cytometry) and Multiplex Imaging applications.

Use our <u>conjugation kits</u> for antibody conjugates that are ready-to-use in as little as 20 minutes with <1 minute hands-on-time and 100% antibody recovery: available for fluorescent dyes, HRP, biotin and gold.

This product is compatible with the Maxpar<sup>®</sup> Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar<sup>®</sup> is a trademark of Fluidigm Canada Inc.

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** 

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Form Liquid

**Storage instructions** Shipped at 4°C. Store at +4°C. Do Not Freeze.

Storage buffer pH: 7.2

Constituent: PBS

Carrier free Yes

Purity Protein A purified

Clonality Monoclonal
Clone number EPR16796

**Isotype** IgG

# **Applications**

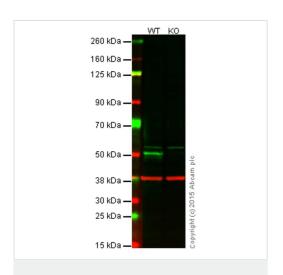
The Abpromise guarantee Our Abpromise guarantee covers the use of ab240217 in the following tested applications.

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

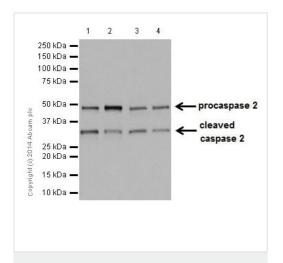
Application	Abreviews	Notes
WB		Use at an assay dependent concentration. Detects a band of approximately 48, 33 kDa (predicted molecular weight: 51 kDa).

Target		
Function	Involved in the activation cascade of caspases responsible for apoptosis execution. Might function by either activating some proteins required for cell death or inactivating proteins necessary for cell survival.	
Tissue specificity	Expressed at higher levels in the embryonic lung, liver and kidney than in the heart and brain. In adults, higher level expression is seen in the placenta, lung, kidney, and pancreas than in the heart, brain, liver and skeletal muscle.	
Sequence similarities	Belongs to the peptidase C14A family.  Contains 1 CARD domain.	
Post-translational modifications	The mature protease can process its own propeptide, but not that of other caspases.	

# **Images**



Western blot - Anti-Caspase-2 antibody [EPR16796] - BSA and Azide free (ab240217)



Western blot - Anti-Caspase-2 antibody [EPR16796] - BSA and Azide free (ab240217)

This data was developed using <u>ab179520</u>, the same antibody clone in a different buffer formulation.

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

Lane 2: Caspase-2 knockout HAP1 cell lysate (20 µg)

**Lanes 1 and 2:** Merged signal (red and green). Green - <u>ab17952</u> observed at 51 kDa. Red - loading control, <u>ab8226</u>, observed at 42 kDa.

**ab179520** was shown to recognize Caspase-2 when Caspase-2 knockout samples were used, along with additional cross-reactive bands. Wild-type and Caspase-2 knockout samples were subjected to SDS-PAGE. **ab179520** and **ab8226** (loading control to beta Actin) were both diluted 1/1000 and incubated overnight at 4°C. Blots were developed with Goat anti-Rabbit lgG H&L (IRDye<sup>®</sup> 800CW) preadsorbed (**ab216773**) and Goat anti-Mouse lgG H&L (IRDye<sup>®</sup> 680RD) preadsorbed (**ab216776**) secondary antibodies at 1/10000 dilution for 1 h at room temperature before imaging.

**All lanes :** Anti-Caspase-2 antibody [EPR16796] (**ab179520**) at 1/2000 dilution

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

Lane 2: Untreated HeLa whole cell lysate

Lane 3: C6 (Rat glial tumor cells) whole cell lysate treated with 1uM staurosporine for 4 hours

Lane 4: Untreated C6 whole cell lysate

Lysates/proteins at 10 µg per lane.

#### Secondary

**All lanes :** Goat anti-rabbit lgG, (H+L), peroxidase conjugated at 1/1000 dilution

**Predicted band size:** 51 kDa **Observed band size:** 33.48 kDa

Exposure time: 3 minutes

This data was developed using <u>ab179520</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

The 33KDa band (cleaved caspase 2) contains subunit p18.

250 kDa —
150 kDa —
100 kDa —
75 kDa —
50 kDa —
50 kDa —
25 kDa —
225 kDa —
220 kDa —
15 kDa —
15 kDa —
10 kDa —

Western blot - Anti-Caspase-2 antibody [EPR16796]

- BSA and Azide free (ab240217)

Anti-Caspase-2 antibody [EPR16796] (ab179520) at 1/1000 dilution + RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) whole cell lysate at 10 µg

#### Secondary

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

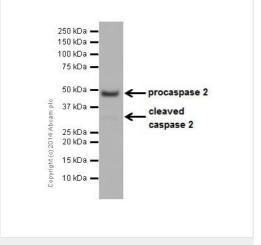
**Predicted band size:** 51 kDa **Observed band size:** 33,48 kDa

Exposure time: 3 minutes

This data was developed using <u>ab179520</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

The 33KDa band (cleaved caspase 2) contains subunit p18.



Western blot - Anti-Caspase-2 antibody [EPR16796] - BSA and Azide free (ab240217)

Anti-Caspase-2 antibody [EPR16796] (ab179520) at 1/2000 dilution + Human fetal kidney tissue lysate at 10 µg

#### Secondary

Anti-Rabbit lgG (HRP), specific to the non-reduced form of lgG at 1/1000 dilution

Predicted band size: 51 kDa

Exposure time: 3 minutes

This data was developed using <u>ab179520</u>, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

The 33KDa band (cleaved caspase 2) contains subunit p18.



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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