abcam

Product datasheet

Anti-Caspase-7 antibody [EPR17029] - BSA and Azide free ab250510

Recombinant RabMAb

5 Images

Overview

Product name	Anti-Caspase-7 antibody [EPR17029] - BSA and Azide free
Description	Rabbit monoclonal [EPR17029] to Caspase-7 - BSA and Azide free
Host species	Rabbit
Tested applications	**Suitable for:** IP, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Rat
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
General notes	ab250510 is the carrier-free version of **ab181579**. Our **carrier-free** 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 **conjugation kits** 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® Antibody Labeling Kit from Fluidigm, without the need for antibody preparation. Maxpar® 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® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

Properties

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	EPR17029
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab250510 in the following tested applications.

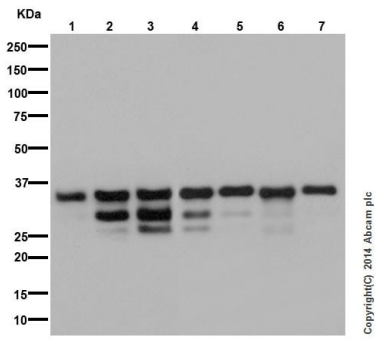
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP		Use at an assay dependent concentration.
WB		Use at an assay dependent concentration. Detects a band of approximately 35, 32, 27, 11 kDa (predicted molecular weight: 34 kDa).
ICC/IF		Use at an assay dependent concentration.

Target

Function	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-Asp- -Gly-217' bond. Overexpression promotes programmed cell death.
Tissue specificity	Highly expressed in lung, skeletal muscle, liver, kidney, spleen and heart, and moderately in testis. No expression in the brain.
Sequence similarities	Belongs to the peptidase C14A family.
Post-translational modifications	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.
Cellular localization	Cytoplasm.

Images



Western blot - Anti-Caspase-7 antibody [EPR17029] - BSA and Azide free (ab250510)

All lanes : Anti-Caspase-7 antibody [EPR17029] (**ab181579**) at 1/5000 dilution

Lane 1 : Mouse heart tissue lysate
Lane 2 : Mouse kidney tissue lysate
Lane 3 : Mouse spleen tissue lysate
Lane 4 : C6 (Rat glial tumor cells) lysate
Lane 5 : RAW 264.7 (Mouse macrophage cells transformed with Abelson murine leukemia virus) lysate
Lane 6 : PC-12 (Rat adrenal gland pheochromocytoma) lysate
Lane 7 : NIH/3T3 (Mouse embyro fibroblast cells) lysate

Lysates/proteins at 10 µg per lane.

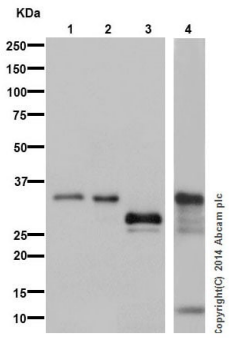
Secondary
All lanes : Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/1000 dilution

Predicted band size: 34 kDa
Observed band size: 35,32,27 kDa

This data was developed using **ab181579**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

Observed band size: 35kDa band is the pro-Caspase 7, 32kDa band is the N-terminal propeptide cleaved Caspase 7, and the 27kDa band is an N-terminal truncated caspase 7.



Western blot - Anti-Caspase-7 antibody [EPR17029] - BSA and Azide free (ab250510)

All lanes : Anti-Caspase-7 antibody [EPR17029] (**ab181579**) at 1/5000 dilution

Lane 1 : Rat brain tissue lysate
Lane 2 : Rat heart tissue lysate
Lane 3 : Rat kidney tissue lysate
Lane 4 : Rat spleen tissue lysate

Lysates/proteins at 10 µg per lane.

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

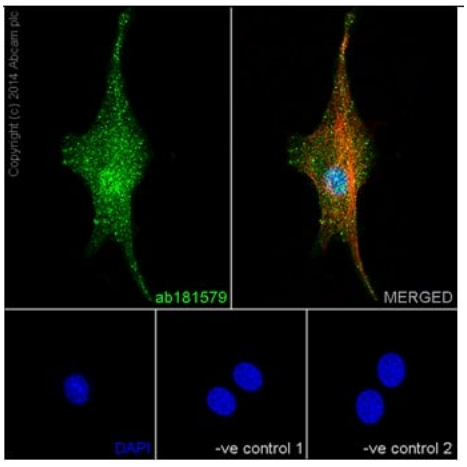
Predicted band size: 34 kDa

This data was developed using **ab181579**, the same antibody clone in a different buffer formulation.

Blocking and dilution buffer: 5% NFDM/TBST.

Observed band size: The 35kDa band is the pro-caspase 7; 32kDa band is the N-terminal propeptide cleaved caspase 7; the 27kDa band is the truncated form and the 11kDa band is Caspase 7 subunit p11.

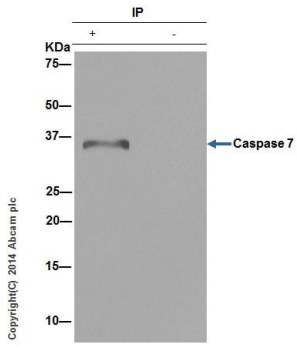
Lanes 1-4 were from the same blot; the exposure time for lanes 1-3 is 1 min and for lane 4 is 2 min.



Immunocytochemistry/ Immunofluorescence - Anti-Caspase-7 antibody [EPR17029] - BSA and Azide free (ab250510)

This data was developed using **ab181579**, the same antibody clone in a different buffer formulation.Immunofluorescent analysis of 4% paraformaldehyde-fixed, 0.1% Triton X-100 permeabilized NIH/3T3 (Mouse embyro fibroblast cells) cells labeling Caspase-7 with **ab181579** at 1/250 dilution, followed by Goat anti-rabbit IgG (Alexa Fluor® 488) (**ab150077**) secondary antibody at 1/400 dilution (green). Cytoplasm and nuclear staining on NIH/3T3 cell line is observed. The nuclear counter stain is DAPI (blue). Tubulin is detected with **ab7291** (anti-Tubulin mouse mAb) at 1/500 dilution and **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution (red).
The negative controls are as follows:
1. **ab181579** at 1/250 dilution followed by **ab150120** (AlexaFluor®594 Goat anti-Mouse secondary) at 1/500 dilution.
2. **ab7291** (anti-Tubulin mouse mAb) at 1/500 dilution followed by

ab150077 (Alexa Fluor®488 Goat Anti-Rabbit IgG H&L) at 1/400 dilution. Please see Pubmed IDs: 22464733 and 11829465 for further information on Caspase-7 localization.



This data was developed using **ab181579**, the same antibody clone in a different buffer formulation.Caspase-7 was immunoprecipitated from 1mg of NIH/3T3 (Mouse embyro fibroblast cells) with **ab181579** at 1/120 dilution. Western blot was performed from the immunoprecipitate using **ab181579** 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: NIH/3T3 whole cell extract. Lane 2: PBS instead of extract.Blocking/Dilution buffer: 5% NFDM/TBST.The observed band at 35kDa band is the pro-caspase-7.

Immunoprecipitation - Anti-Caspase-7 antibody [EPR17029] - BSA and Azide free (ab250510)

Anti-Caspase-7 antibody [EPR17029] - BSA and Azide free (ab250510)

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