

Product datasheet

Anti-Cleaved Caspase-7 antibody [EPR22840-25] ab256469

KO VALIDATED Recombinant RabMAb[®]

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Overview

Product name	Anti-Cleaved Caspase-7 antibody [EPR22840-25]
Description	Rabbit monoclonal [EPR22840-25] to Cleaved Caspase-7
Host species	Rabbit
Tested applications	Suitable for: WB, IP Unsuitable for: Flow Cyt, ICC/IF or IHC-P
Species reactivity	Reacts with: Mouse, Rat, Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	WB: HeLa treated with 1 μ M staurosporine for 3 hours whole cell lysate, Wild-type HAP1 treated with 1 μ M staurosporine for 3 hours whole cell lysate, mouse and rat spleen whole cell lysate. IP: HeLa treated with 1 μ M Staurosporine for 3 hours whole cell lysate .
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none">- High batch-to-batch consistency and reproducibility- Improved sensitivity and specificity- Long-term security of supply- Animal-free production <p>For more information see here.</p> <p>Our RabMAb[®] technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to RabMAb[®] patents.</p>

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	pH: 7.2 Preservative: 0.01% Sodium azide Constituents: PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	EPR22840-25
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab256469 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		1/1000. Detects a band of approximately 22, 18 kDa (predicted molecular weight: 34 kDa).
IP		1/30.

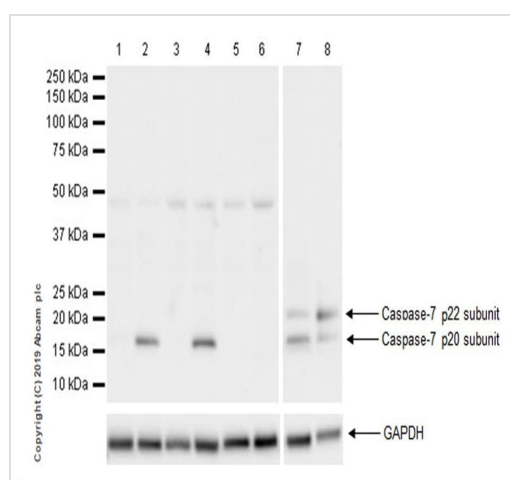
Application notes Is unsuitable for Flow Cyt, ICC/IF or IHC-P.

Target

Relevance Caspases are cysteine proteases, expressed as inactive precursors, that mediate apoptosis by proteolysis of specific substrates. Caspases have the ability to cleave after aspartic acid residues. There are two classes of caspases involved in apoptosis; initiators (activation by receptor cluster) and effectors (activation by mitochondrial permeability transition). Proapoptotic signals autocatalytically activate initiator caspases, such as Caspase 8 and Caspase 9. Activated initiator caspases then process effector caspases, such as Caspase 3 and Caspase 7, which in turn cause cell collapse.

Cellular localization Cytoplasmic

Images



Western blot - Anti-Cleaved Caspase-7 antibody [EPR22840-25] (ab256469)

All lanes : Anti-Cleaved Caspase-7 antibody [EPR22840-25] (ab256469) at 1/1000 dilution

Lane 1 : Untreated HeLa (human cervix adenocarcinoma epithelial cell) whole cell lysate

Lane 2 : HeLa treated with 1 μ M staurosporine for 3 hours whole cell lysate

Lane 3 : Untreated wild-type HAP1 whole cell lysate

Lane 4 : Wild-type HAP1 treated with 1 μ M staurosporine for 3 hours whole cell lysate

Lane 5 : Untreated caspase-7 knockout HAP1 whole cell lysate

Lane 6 : Caspase-7 knockout HAP1 treated with 1 μ M staurosporine for 3 hours whole cell lysate

Lane 7 : Mouse spleen lysate

Lane 8 : Rat spleen lysate

Lysates/proteins at 20 µg per lane.

Secondary

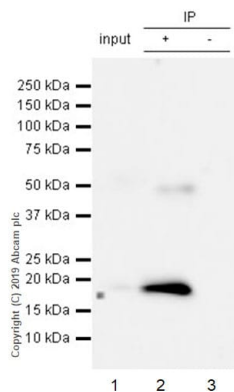
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/100000 dilution

Predicted band size: 34 kDa

Observed band size: 18,22 kDa

Exposure time: 26 seconds

Caspase-7 is activated upon apoptotic induction. Caspase-7 p22 subunit (22 kDa) and p20 subunit (18 kDa) are observed. The molecular weight observed is consistent with what has been described in the literature (PMID: 16352606). This antibody reacts with an unidentifiable protein around 48 kDa. ab256469 was shown to specifically react with Caspase-7 in wild-type HAP1 cells as signal was lost in Caspase-7 knockout cells. Wild-type and Caspase-7 knockout samples were subjected to SDS-PAGE. ab256469 and **ab181602** (Rabbit anti-GAPDH loading control) were incubated 1 hour at room temperature at 1/1000 dilution and 1/200,000 dilution respectively. Blots were developed with Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (**ab97051**) secondary antibody at 1/100,000 dilution for 1 hour at room temperature before imaging. The blot was developed on a BIO-RAD[®] ChemiDoc[™] instrument using the ECL technique. Blocking and Diluting Buffer and concentration: 5% NFDm/TBST.



Immunoprecipitation - Anti-Cleaved Caspase-7 antibody [EPR22840-25] (ab256469)

Cleaved Caspase-7 was immunoprecipitated from 0.35 mg HeLa (Human cervix adenocarcinoma epithelial cell) treated with 1 μ M Staurosporine for 3h whole cell lysate 10 μ g with ab256469 at 1/30 dilution (2 μ g in 0.35mg lysates). Western blot was performed on the immunoprecipitate using ab256469. VeriBlot for IP Detection Reagent (HRP) ([ab131366](#)) was used at 1/1000 dilution.

Lane 1: HeLa (Human cervix adenocarcinoma epithelial cell) treated with 1 μ M Staurosporine for 3h whole cell lysate 10 μ g

Lane 2: ab256469 IP in HeLa treated with 1 μ M Staurosporine for 3h whole cell lysate

Lane 3: Rabbit monoclonal IgG ([ab172730](#)) instead of ab256469 in HeLa treated with 1 μ M Staurosporine for 3h whole cell lysate.

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

Exposure time: 15 seconds.

This antibody reacts with an unidentifiable protein around 48 kDa.

Why choose a recombinant antibody?



Research with confidence
Consistent and reproducible results



Long-term and scalable supply
Recombinant technology



Success from the first experiment
Confirmed specificity



Ethical standards compliant
Animal-free production

Anti-Cleaved Caspase-7 antibody [EPR22840-25] (ab256469)

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

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