

Product datasheet

Anti-pro Caspase-7 antibody [Y33] ab32067

KO VALIDATED Recombinant RabMAB

[1 References](#) [4 Images](#)

Overview

Product name	Anti-pro Caspase-7 antibody [Y33]
Description	Rabbit monoclonal [Y33] to pro Caspase-7
Host species	Rabbit
Specificity	The antibody only recognizes the pro-form of Caspase-7. It does not react with the cleaved forms (active enzyme) of Caspase-7.
Tested applications	Suitable for: WB, IHC-P Unsuitable for: Flow Cyt or IP
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
Positive control	Jurkat cell lysate and human lung squamous carcinoma.
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> <p>Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with these species. Please contact us for more information.</p>

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 49% PBS, 50% Glycerol (glycerin, glycerine), 0.05% BSA
Purity	Protein A purified

Clonality	Monoclonal
Clone number	Y33
Isotype	IgG

Applications

The Abpromise guarantee Our [Abpromise guarantee](#) covers the use of ab32067 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 34 kDa (predicted molecular weight: 34 kDa).
IHC-P		1/50. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.

Application notes Is unsuitable for Flow Cyt or IP.

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.

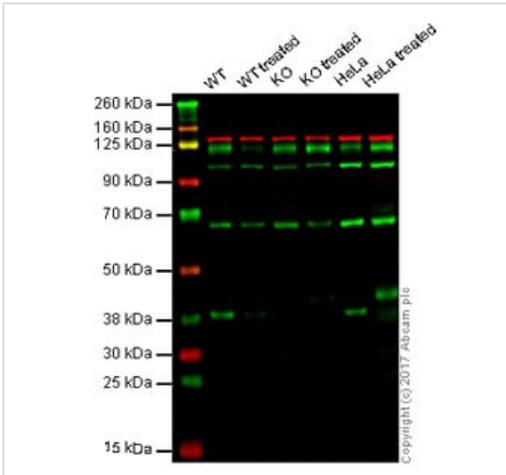
Tissue specificity Highly expressed in lung, skeletal muscle, liver, kidney, spleen and heart, and moderately in testis. No expression in the brain.

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-pro Caspase-7 antibody [Y33] (ab32067)

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

Lane 2: Staurosporin treated HAP1 whole cell lysate (20 µg)

Lane 3: CASP7 knockout HAP1 whole cell lysate (20 µg)

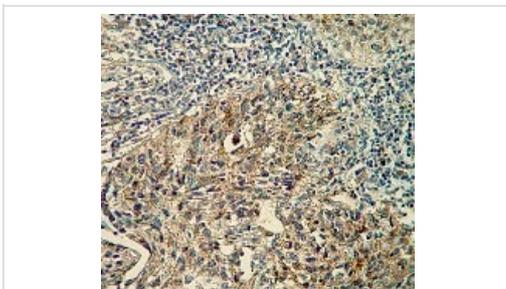
Lane 4: Staurosporin treated CASP7 knockout HAP1 whole cell lysate (20 µg)

Lane 5: HeLa whole cell lysate (20 µg)

Lane 6: Staurosporin treated HeLa whole cell lysate (20 µg)

Lanes 1 - 6: Merged signal (red and green). Green - ab32067 observed at 38 kDa. Red - loading control, ab18058, observed at 130 kDa.

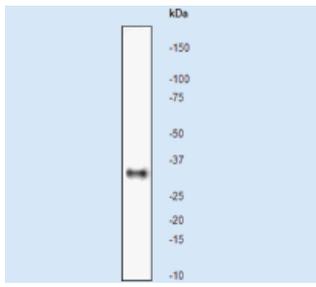
ab32067 was shown to recognize pro Caspase 7 when HAP1 + pro Caspase 7 knockout samples were used, along with additional cross-reactive bands. Wild-type and the pro Caspase 7 knockout samples were subjected to SDS-PAGE. Ab32067 and ab18058 (Mouse anti-Vinculin loading control) were incubated overnight at 4°C at 1/1000 dilution and 1/10000 dilution respectively. Blots were developed with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed ab216773 and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed ab216776 secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-pro Caspase-7 antibody [Y33] (ab32067)

Immunohistochemical analysis of paraffin-embedded human lung squamous carcinoma using ab32067 at 1/50 dilution.

Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.



Anti-pro Caspase-7 antibody [Y33] (ab32067) at 1/1000 dilution + Jurkat cell lysate

Predicted band size: 34 kDa

Observed band size: 34 kDa

Western blot - Anti-pro Caspase-7 antibody [Y33] (ab32067)

Why choose a recombinant antibody?

 <p>Research with confidence Consistent and reproducible results</p>	 <p>Long-term and scalable supply Recombinant technology</p>
 <p>Success from the first experiment Confirmed specificity</p>	 <p>Ethical standards compliant Animal-free production</p>

Anti-pro Caspase-7 antibody [Y33] (ab32067)

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

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