# abcam

### Product datasheet

## Anti-pro Caspase-7 antibody [Y33] ab32067





#### 2 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.

Suitable for: WB, IHC-P **Tested applications** 

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** 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**.

Mouse, Rat: We have preliminary internal testing data to indicate this antibody may not react with

these species. Please contact us for more information.

#### **Properties**

**Form** Liquid

Storage instructions Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.

pH: 7.20 Storage buffer

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 IqG

#### **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

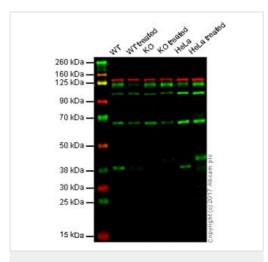
modifications

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

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

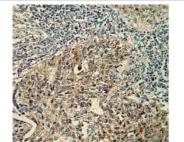
Lane 4: Staurosporin treated CASP7 knockout HAP1 whole cell lysate (20 µg)

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.

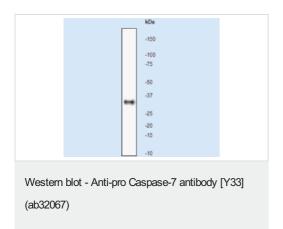
ab32067 was shown to recognize pro Caspase 7 when HAP1 + pro Caspase 7 knockout samples were used, along with additional cross-reactive bands. Wild-type and the pro Caspase 7 knockout samples were subjected to SDS-PAGE. Ab32067 and <a href="mailto:ab18058">ab18058</a> (Mouse anti-Vinculin loading control) 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 <a href="mailto:ab216773">ab216773</a> and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed <a href="mailto:ab216776">ab216776</a> secondary antibodies at 1/20000 dilution for 1 hour at room temperature before imaging.



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

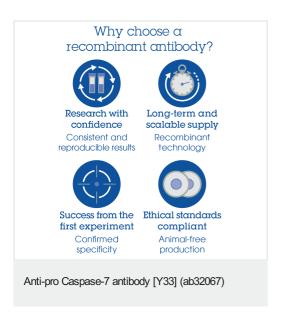
Immunohistochemical analysis of paraffin-embedded human lung squamous carcinoma using ab32067 at 1/50 dilution.

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



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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

#### Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors