

## Product datasheet

# Anti-Caspase-10/CASP-10 antibody [EPR10890] ab177475

Recombinant RabMAb

★★★★★ 1 Abreviews 3 References 5 Images

### Overview

Product name	Anti-Caspase-10/CASP-10 antibody [EPR10890]
Description	Rabbit monoclonal [EPR10890] to Caspase-10/CASP-10
Host species	Rabbit
Tested applications	<b>Suitable for:</b> Flow Cyt (Intra), WB, IHC-P, IP <b>Unsuitable for:</b> ICC/IF
Species reactivity	<b>Reacts with:</b> Human
Immunogen	Recombinant fragment within Human Caspase-10/CASP-10. The exact sequence is proprietary. Database link: <a href="#">Q92851</a>
Positive control	K562 and Jurkat whole cell lysate ( <a href="#">ab7899</a> ); Human hepatocellular carcinoma tissue; K562 cells.
General notes	<p>This product is a recombinant monoclonal antibody, which offers several advantages including:</p> <ul style="list-style-type: none"> <li>- High batch-to-batch consistency and reproducibility</li> <li>- Improved sensitivity and specificity</li> <li>- Long-term security of supply</li> <li>- Animal-free production</li> </ul> <p>For more information <a href="#">see here</a>.</p> <p>Our RabMAb<sup>®</sup> technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to <a href="#">RabMAb<sup>®</sup> patents</a>.</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. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.20 Preservative: 0.01% Sodium azide Constituents: 9% PBS, 40% Glycerol (glycerin, glycerine), 0.05% BSA, 50% Tissue culture

	supernatant
<b>Purity</b>	Protein A purified
<b>Clonality</b>	Monoclonal
<b>Clone number</b>	EPR10890
<b>Isotype</b>	IgG

## Applications

**The Abpromise guarantee** Our **Abpromise guarantee** covers the use of ab177475 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
Flow Cyt (Intra)		1/100 - 1/500. <b>ab172730</b> - Rabbit monoclonal IgG, is suitable for use as an isotype control with this antibody.
WB	★★★★★ (1)	1/1000 - 1/10000. Predicted molecular weight: 58 kDa.
IHC-P		1/50 - 1/100. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
IP		1/10 - 1/100.

**Application notes** Is unsuitable for ICC/IF.

## Target

<b>Function</b>	Involved in the activation cascade of caspases responsible for apoptosis execution. Recruited to both Fas- and TNFR-1 receptors in a FADD dependent manner. May participate in the granzyme B apoptotic pathways. Cleaves and activates caspase-3, -4, -6, -7, -8, and -9. Hydrolyzes the small- molecule substrates, Tyr-Val-Ala-Asp- -AMC and Asp-Glu-Val-Asp- -AMC. Isoform C is proteolytically inactive.
<b>Tissue specificity</b>	Detectable in most tissues. Lowest expression is seen in brain, kidney, prostate, testis and colon.
<b>Involvement in disease</b>	Defects in CASP10 are the cause of autoimmune lymphoproliferative syndrome type 2A (ALPS2A) [MIM:603909]. ALPS2 is characterized by abnormal lymphocyte and dendritic cell homeostasis and immune regulatory defects. Defects in CASP10 are a cause of familial non-Hodgkin lymphoma (NHL) [MIM:605027]. NHL is a cancer that starts in cells of the lymph system, which is part of the body's immune system. NHLs can occur at any age and are often marked by enlarged lymph nodes, fever and weight loss. Defects in CASP10 are a cause of gastric cancer (GASC) [MIM:613659]. A malignant disease which starts in the stomach, can spread to the esophagus or the small intestine, and can extend through the stomach wall to nearby lymph nodes and organs. It also can metastasize to other parts of the body. The term gastric cancer or gastric carcinoma refers to adenocarcinoma of the stomach that accounts for most of all gastric malignant tumors. Two main histologic types are recognized, diffuse type and intestinal type carcinomas. Diffuse tumors are poorly differentiated

infiltrating lesions resulting in thickening of the stomach. In contrast, intestinal tumors are usually exophytic, often ulcerating, and associated with intestinal metaplasia of the stomach, most often observed in sporadic disease.

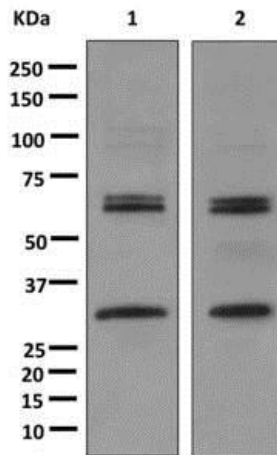
### Sequence similarities

Belongs to the peptidase C14A family.  
Contains 2 DED (death effector) domains.

### Post-translational modifications

Cleavage by granzyme B and autocatalytic activity generate the two active subunits.  
Phosphorylated upon DNA damage, probably by ATM or ATR.

## Images



**All lanes :** Anti-Caspase-10/CASP-10 antibody [EPR10890] (ab177475) at 1/1000 dilution

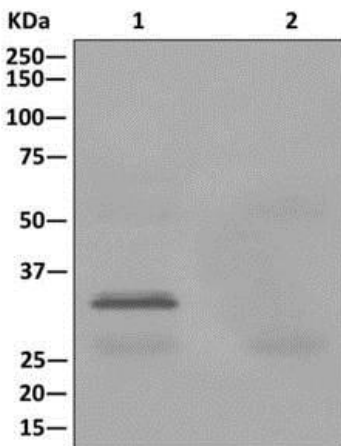
**Lane 1 :** K562 cell lysate

**Lane 2 :** Jurkat cell lysate

Lysates/proteins at 10 µg per lane.

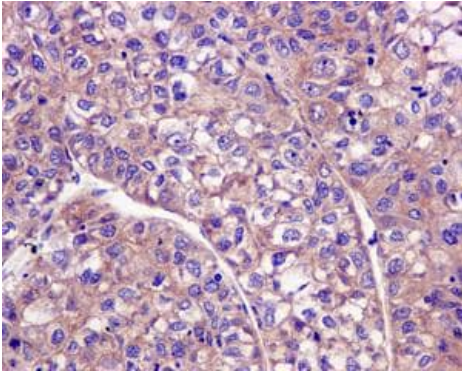
**Predicted band size:** 58 kDa

Western blot - Anti-Caspase-10/CASP-10 antibody [EPR10890] (ab177475)



Western blot analysis on immunoprecipitation pellet from (1) K562 cell lysate or (2) 1XPBS (negative control) using ab177475 and HRP-conjugated anti-rabbit IgG preferentially detecting the non-reduced form of rabbit IgG.

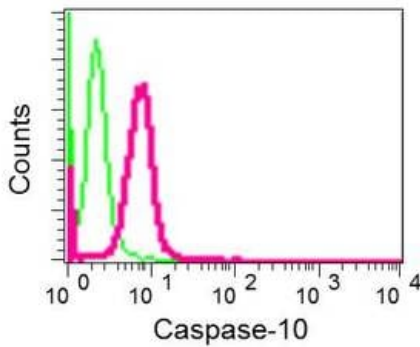
Immunoprecipitation - Anti-Caspase-10/CASP-10 antibody [EPR10890] (ab177475)



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspase-10/CASP-10 antibody [EPR10890] (ab177475)

Immunohistochemical analysis of paraffin-embedded Human hepatocellular carcinoma tissue labeling Caspase-10/CASP-10 with ab177475 at 1/50 dilution.

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



Flow Cytometry (Intracellular) - Anti-Caspase-10/CASP-10 antibody [EPR10890] (ab177475)

Intracellular flow cytometric analysis of permeabilized K562 cells labeling Caspase 10/CASP-10 with ab177475 at 1/100 dilution (red) compared to a rabbit IgG negative control (green).

### 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-Caspase-10/CASP-10 antibody [EPR10890]  
(ab177475)

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

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