

Product datasheet

Anti-Caspase-8 antibody ab25901

★★★★★ [3 Abreviews](#) [136 References](#) [6 Images](#)

Overview

| | |
|----------------------------|--|
| Product name | Anti-Caspase-8 antibody |
| Description | Rabbit polyclonal to Caspase-8 |
| Host species | Rabbit |
| Tested applications | Suitable for: ICC, IHC-P, ICC/IF, WB |
| Species reactivity | Reacts with: Mouse, Rat, Human |
| Immunogen | Synthetic peptide corresponding to Human Caspase-8 (C terminal). Synthetic peptide (Human) - a 16 amino acid peptide from near the carboxy-terminus of human Caspase-8 isoform A. Database link: Q14790 |

General notes

The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.

If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As

Properties

| | |
|-----------------------------|--|
| Form | Liquid |
| Storage instructions | Shipped at 4°C. Store at +4°C short term (1-2 weeks). Store at +4°C. |
| Storage buffer | pH: 7.2 Preservative: 0.02% Sodium azide Constituent: PBS |
| Purity | Immunogen affinity purified |
| Purification notes | Caspase-8 Antibody is affinity chromatography purified via peptide column. |
| Clonality | Polyclonal |
| Isotype | IgG |

Applications

The Abpromise guarantee

Our **Abpromise guarantee** covers the use of ab25901 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 |
|-------------|-----------|--|
| ICC | | Use at an assay dependent concentration. |
| IHC-P | | Use at an assay dependent concentration. Human samples only |
| ICC/IF | | Use a concentration of 20 µg/ml. Human samples only |
| WB | ★★★★☆ (2) | Use a concentration of 0.5 - 2 µg/ml. Detects a band of approximately 55 kDa (predicted molecular weight: 55 kDa). |

Target

Function

Most upstream protease of the activation cascade of caspases responsible for the TNFRSF6/FAS mediated and TNFRSF1A induced cell death. Binding to the adapter molecule FADD recruits it to either receptor. The resulting aggregate called death-inducing signaling complex (DISC) performs CASP8 proteolytic activation. The active dimeric enzyme is then liberated from the DISC and free to activate downstream apoptotic proteases. Proteolytic fragments of the N-terminal propeptide (termed CAP3, CAP5 and CAP6) are likely retained in the DISC. Cleaves and activates CASP3, CASP4, CASP6, CASP7, CASP9 and CASP10. May participate in the GZMB apoptotic pathways. Cleaves ADPRT. Hydrolyzes the small-molecule substrate, Ac-Asp-Glu-Val-Asp-AMC. Likely target for the cowpox virus CRMA death inhibitory protein. Isoform 5, isoform 6, isoform 7 and isoform 8 lack the catalytic site and may interfere with the pro-apoptotic activity of the complex.

Tissue specificity

Isoform 1, isoform 5 and isoform 7 are expressed in a wide variety of tissues. Highest expression in peripheral blood leukocytes, spleen, thymus and liver. Barely detectable in brain, testis and skeletal muscle.

Involvement in disease

Defects in CASP8 are the cause of caspase-8 deficiency (CASP8D) [MIM:607271]. CASP8D is a disorder resembling autoimmune lymphoproliferative syndrome (ALPS). It is characterized by lymphadenopathy, splenomegaly, and defective CD95-induced apoptosis of peripheral blood lymphocytes (PBLs). It leads to defects in activation of T-lymphocytes, B-lymphocytes, and natural killer cells leading to immunodeficiency characterized by recurrent sinopulmonary and herpes simplex virus infections and poor responses to immunization.

Sequence similarities

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

Domain

Isoform 9 contains a N-terminal extension that is required for interaction with the BCAP31 complex.

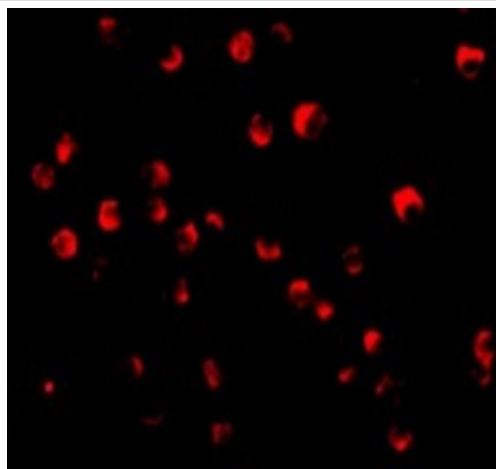
Post-translational modifications

Generation of the subunits requires association with the death-inducing signaling complex (DISC), whereas additional processing is likely due to the autocatalytic activity of the activated protease. GZMB and CASP10 can be involved in these processing events.
Phosphorylated upon DNA damage, probably by ATM or ATR.

Cellular localization

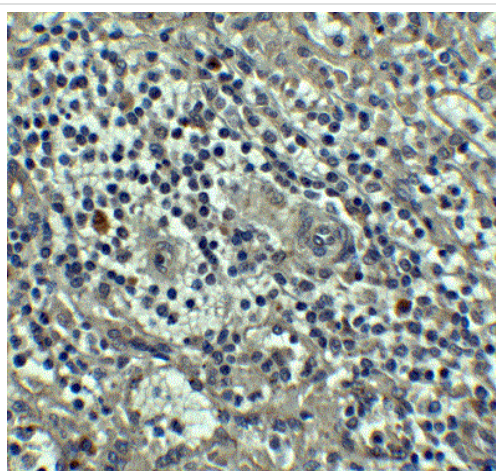
Cytoplasm.

Images



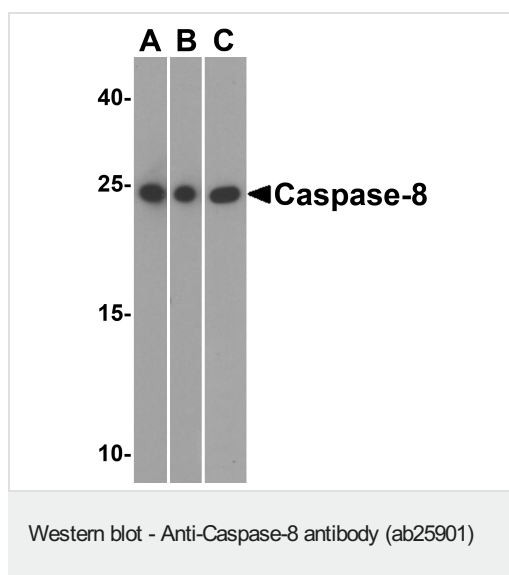
Immunocytochemistry/Immunofluorescence of Jurkat cells labeling Caspase-8 with Anti-Caspase-8 antibody (ab25901) at 20µg/ml.

Immunocytochemistry/ Immunofluorescence - Anti-Caspase-8 antibody (ab25901)



Immunohistochemistry of Caspase-8 in human spleen tissue with Caspase-8 antibody at 5 µg/ml.

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspase-8 antibody (ab25901)



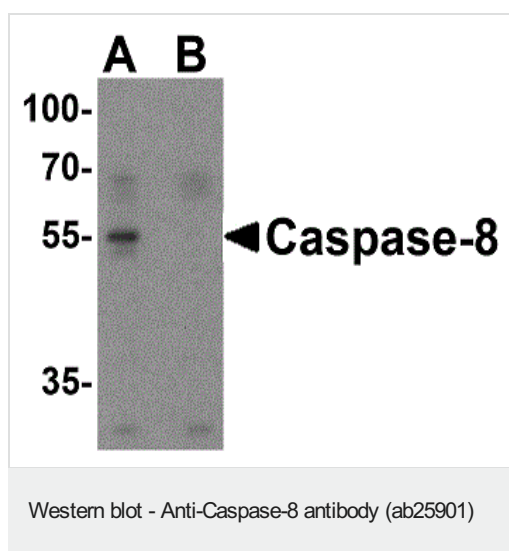
All lanes : Anti-Caspase-8 antibody (ab25901) at 0.5 µg/ml

Lane 1 : Human spleen

Lane 2 : Mouse spleen

Lane 3 : Rat spleen

Predicted band size: 55 kDa



All lanes : Anti-Caspase-8 antibody (ab25901) at 1 µg/ml

Lane 1 : Jurkat cell lysates with Absence of blocking buffer

Lane 2 : Jurkat cell lysates with Presence of blocking buffer

Predicted band size: 55 kDa



Immunocytochemistry/ Immunofluorescence - Anti-Caspase-8 antibody (ab25901)

ab25901 at 2ug/ml staining Caspase-8 in Jurkat cells by ICC/IF



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caspase-8 antibody (ab25901)

IHC image of Caspase-8 staining in human spleen formalin fixed paraffin embedded tissue section, performed on a Leica Bond system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with **ab25901**, 1µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

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

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