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Product datasheet

Anti-Caspase-8 antibody ab138485

★★★★★ 7 Abreviews 3 References 1 Image

Overview

Product name	Anti-Caspase-8 antibody
Description	Rabbit polyclonal to Caspase-8
Host species	Rabbit
Tested applications	**Suitable for:** IP, WB
Species reactivity	**Reacts with:** Mouse **Predicted to work with:** Rat, Chinese hamster
Immunogen	Synthetic peptide within Mouse Caspase-8 aa 400 to the C-terminus conjugated to keyhole limpet haemocyanin. The exact sequence is proprietary. Database link: **O89110**
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). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.40 Preservative: 0.02% Sodium azide Constituent: PBS Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
Purity	Immunogen affinity purified
Clonality	Polyclonal

Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab138485 in the following tested applications.

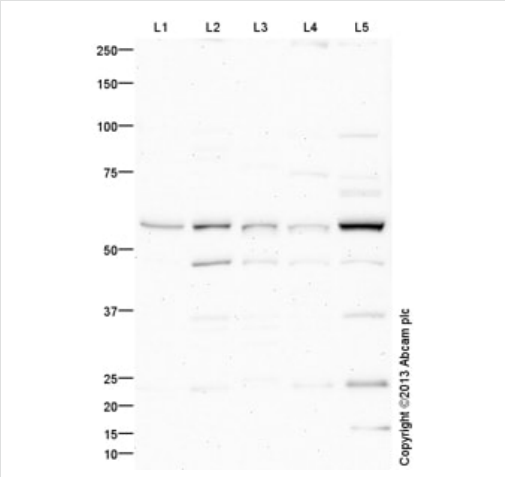
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IP	★★★★★ (4)	Use at an assay dependent concentration.
WB	★★★★★ (3)	Use a concentration of 1 µg/ml. Detects a band of approximately 58 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



Western blot - Anti-Caspase-8 antibody (ab138485)

All lanes : Anti-Caspase-8 antibody (ab138485) at 1 µg/ml (Milk blocking 3%)

Lane 1 : Spleen (Mouse) Tissue Lysate
Lane 2 : Thymus (Mouse) Tissue Lysate
Lane 3 : Lung (Mouse) Whole Cell Lysate - normal tissue
Lane 4 : Liver (Mouse) Tissue Lysate
Lane 5 : RAW 264.7 (Mouse leukaemic monocyte macrophage cell line) Whole Cell Lysate

Lysates/proteins at 25 µg per lane.

Secondary
All lanes : Goat Anti-Rabbit IgG H&L (HRP) (**ab97051**) at 1/10000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 55 kDa
Observed band size: 58 kDa
Additional bands at: 24 kDa (possible non-specific binding), 36 kDa (possible non-specific binding), 48 kDa (possible non-specific binding)

Exposure time: 8 minutes

This blot was produced using a 10% Bis-tris gel under the MOPS buffer system. The gel was run at 200V for 50 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes. The membrane was then blocked for an hour using 3% Milk before being incubated with ab138485 overnight at 4°C. Antibody binding was detected using an anti-rabbit antibody conjugated to HRP, and visualised using ECL development solution.

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