abcam

Product datasheet

Anti-Caspase-8 p10 antibody [C502S] ab2553

2 References

Overview

Product name	Anti-Caspase-8 p10 antibody [C502S]
Description	Mouse monoclonal [C502S] to Caspase-8 p10
Host species	Mouse
Specificity	This antibody recognizes the 10 kDa small subunit of Caspase 8. Does not detect full-length caspase 8.
Tested applications	**Suitable for:** IP, WB
Species reactivity	**Reacts with:** Human
Immunogen	Synthetic peptide corresponding to Human Caspase-8 p10 (N terminal).

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C or -80°C. Avoid repeated freeze / thaw cycles.
Storage buffer	Preservative: 0.02% Thimerosal (merthiolate) Constituents: 50% Glycerol, 1% BSA, PBS
Purity	Immunogen affinity purified
Clonality	Monoclonal
Clone number	C502S
Myeloma	unknown
Isotype	IgG1
Light chain type	unknown

Applications

Our Abpromise guarantee covers the use of **ab2553** 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		Use a concentration of 10 µg/ml.
WB		Use a concentration of 1 µg/ml.

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	Caspase-8 deficiency
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. Phosphorylation on Ser-387 during mitosis by CDK1 inhibits activation by proteolysis and prevents apoptosis. This phosphorylation occurs in cancer cell lines, as well as in primary breast tissues and lymphocytes.
Cellular localization	Cytoplasm.

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