

## Anti-Caspase-8 Rabbit Monoclonal Antibody Catalog # ABO13950

### Specification

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#### Anti-Caspase-8 Rabbit Monoclonal Antibody - Product Information

Application	WB, IF, ICC
Primary Accession	<a href="#">Q14790</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-Caspase-8 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF applications. This antibody reacts with Human.

#### Anti-Caspase-8 Rabbit Monoclonal Antibody - Additional Information

Gene ID 841

#### Other Names

Caspase-8, CASP-8, 3.4.22.61, Apoptotic cysteine protease, Apoptotic protease Mch-5, CAP4, FADD-homologous ICE/ced-3-like protease, FADD-like ICE, FLICE, ICE-like apoptotic protease 5, MORT1-associated ced-3 homolog, MACH, Caspase-8 subunit p18, Caspase-8 subunit p10, CASP8 {ECO:0000303|PubMed:9931493, ECO:0000312|HGNC:HGNC:1509}

#### Calculated MW

55391 MW KDa

#### Application Details

WB 1:500-1:2000<br>ICC/IF 1:50-1:100

#### Subcellular Localization

Cytoplasm.

#### 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.

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human Caspase-8

#### Purification

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

## Anti-Caspase-8 Rabbit Monoclonal Antibody - Protein Information

**Name** CASP8 {ECO:0000303|PubMed:9931493, ECO:0000312|HGNC:HGNC:1509}

### Function

Thiol protease that plays a key role in programmed cell death by acting as a molecular switch for apoptosis, necroptosis and pyroptosis, and is required to prevent tissue damage during embryonic development and adulthood (PubMed: <a href="http://www.uniprot.org/citations/23516580" target="\_blank">23516580</a>, PubMed: <a href="http://www.uniprot.org/citations/35338844" target="\_blank">35338844</a>, PubMed: <a href="http://www.uniprot.org/citations/35446120" target="\_blank">35446120</a>, PubMed: <a href="http://www.uniprot.org/citations/8681376" target="\_blank">8681376</a>, PubMed: <a href="http://www.uniprot.org/citations/8681377" target="\_blank">8681377</a>, PubMed: <a href="http://www.uniprot.org/citations/8962078" target="\_blank">8962078</a>, PubMed: <a href="http://www.uniprot.org/citations/9006941" target="\_blank">9006941</a>, PubMed: <a href="http://www.uniprot.org/citations/9184224" target="\_blank">9184224</a>). Initiator protease that induces extrinsic apoptosis by mediating cleavage and activation of effector caspases responsible for FAS/CD95-mediated and TNFRSF1A-induced cell death (PubMed: <a href="http://www.uniprot.org/citations/23516580" target="\_blank">23516580</a>, PubMed: <a href="http://www.uniprot.org/citations/35338844" target="\_blank">35338844</a>, PubMed: <a href="http://www.uniprot.org/citations/35446120" target="\_blank">35446120</a>, PubMed: <a href="http://www.uniprot.org/citations/8681376" target="\_blank">8681376</a>, PubMed: <a href="http://www.uniprot.org/citations/8681377" target="\_blank">8681377</a>, PubMed: <a href="http://www.uniprot.org/citations/8962078" target="\_blank">8962078</a>, PubMed: <a href="http://www.uniprot.org/citations/9006941" target="\_blank">9006941</a>, PubMed: <a href="http://www.uniprot.org/citations/9184224" target="\_blank">9184224</a>). Cleaves and activates effector caspases CASP3, CASP4, CASP6, CASP7, CASP9 and CASP10 (PubMed: <a href="http://www.uniprot.org/citations/16916640" target="\_blank">16916640</a>, PubMed: <a href="http://www.uniprot.org/citations/8962078" target="\_blank">8962078</a>, PubMed: <a href="http://www.uniprot.org/citations/9006941" target="\_blank">9006941</a>). Binding to the adapter molecule FADD recruits it to either receptor FAS/TNFRSF6 or TNFRSF1A (PubMed: <a href="http://www.uniprot.org/citations/8681376" target="\_blank">8681376</a>, PubMed: <a href="http://www.uniprot.org/citations/8681377" target="\_blank">8681377</a>). The resulting aggregate called the death-inducing signaling complex (DISC) performs CASP8 proteolytic activation (PubMed: <a href="http://www.uniprot.org/citations/9184224" target="\_blank">9184224</a>). The active dimeric enzyme is then liberated from the DISC and free to activate downstream apoptotic proteases (PubMed: <a href="http://www.uniprot.org/citations/9184224" target="\_blank">9184224</a>). Proteolytic fragments of the N-terminal propeptide (termed CAP3, CAP5 and CAP6) are likely retained in the DISC (PubMed: <a href="http://www.uniprot.org/citations/9184224" target="\_blank">9184224</a>). In addition to extrinsic apoptosis, also acts as a negative regulator of necroptosis: acts by cleaving RIPK1 at 'Asp-324', which is crucial to inhibit RIPK1 kinase activity, limiting TNF-induced apoptosis, necroptosis and inflammatory response (PubMed: <a href="http://www.uniprot.org/citations/31827280" target="\_blank">31827280</a>, PubMed: <a href="http://www.uniprot.org/citations/31827281" target="\_blank">31827281</a>). Also able to initiate pyroptosis by mediating cleavage and activation of gasdermin-C and -D (GSDMC and GSDMD, respectively): gasdermin cleavage promotes release of the N-terminal moiety that binds to membranes and forms pores, triggering pyroptosis (PubMed: <a href="http://www.uniprot.org/citations/32929201" target="\_blank">32929201</a>, PubMed: <a href="http://www.uniprot.org/citations/34012073" target="\_blank">34012073</a>). Initiates pyroptosis following inactivation of MAP3K7/TAK1 (By similarity). Also acts as a regulator of innate

immunity by mediating cleavage and inactivation of N4BP1 downstream of TLR3 or TLR4, thereby promoting cytokine production (By similarity). May participate in the Granzyme B (GZMB) cell death pathways (PubMed:<a href="http://www.uniprot.org/citations/8755496" target="\_blank">8755496</a>). Cleaves PARP1 and PARP2 (PubMed:<a href="http://www.uniprot.org/citations/8681376" target="\_blank">8681376</a>). Independent of its protease activity, promotes cell migration following phosphorylation at Tyr-380 (PubMed:<a href="http://www.uniprot.org/citations/18216014" target="\_blank">18216014</a>, PubMed:<a href="http://www.uniprot.org/citations/27109099" target="\_blank">27109099</a>).

#### Cellular Location

Cytoplasm {ECO:0000250|UniProtKB:Q9JHX4}. Nucleus {ECO:0000250|UniProtKB:Q9JHX4}. Cell projection, lamellipodium. Note=Recruitment to lamellipodia of migrating cells is enhanced by phosphorylation at Tyr-380

#### Tissue Location

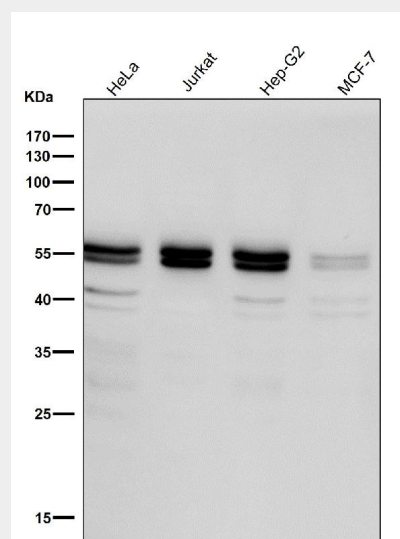
Isoform 1, isoform 5 and isoform 7 are expressed in a wide variety of tissues. Highest expression in peripheral blood leukocytes, spleen, thymus and liver. Barely detectable in brain, testis and skeletal muscle

### Anti-Caspase-8 Rabbit Monoclonal Antibody - Protocols

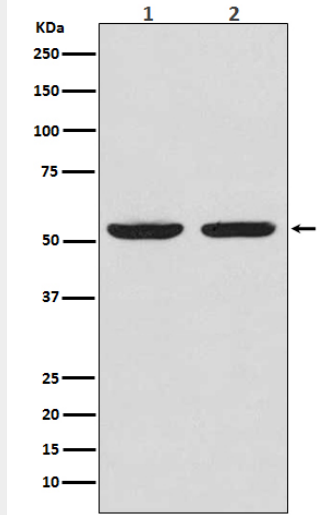
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

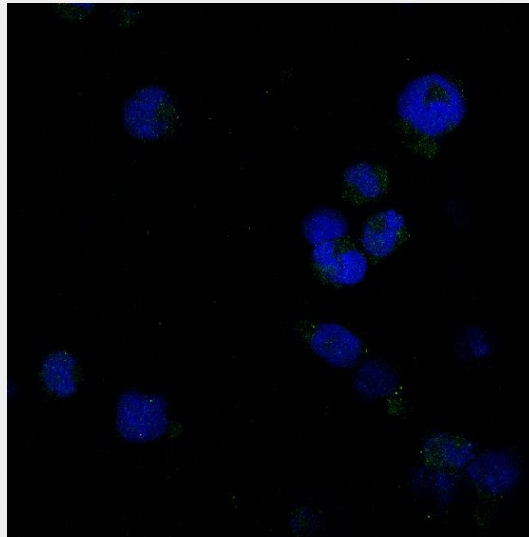
### Anti-Caspase-8 Rabbit Monoclonal Antibody - Images



All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of Caspase-8 expression in(1) Jurkat cell lysate; (2)HeLa cell lysate.



Immunofluorescent analysis of K562cells, using Caspase-8 Antibody.