

Anti-Caspase-8 CASP8 Rabbit Monoclonal Antibody Catalog # ABO13984

Specification

Anti-Caspase-8 CASP8 Rabbit Monoclonal Antibody - Product Information

Application	WB, IHC, IF, ICC
Primary Accession	Q14790
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

Description

Anti-Caspase-8 CASP8 Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF applications. This antibody reacts with Human, Mouse, Rat.

Anti-Caspase-8 CASP8 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 1:1000-1:2000
IHC 1:50-1:200
ICC/IF 1:50-1:200

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 CASP8 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: 23516580, PubMed: 35338844, PubMed: 35446120, PubMed: 8681376, PubMed: 8681377, PubMed: 8962078, PubMed: 9006941, PubMed: 9184224). 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: 23516580, PubMed: 35338844, PubMed: 35446120, PubMed: 8681376, PubMed: 8681377, PubMed: 8962078, PubMed: 9006941, PubMed: 9184224). Cleaves and activates effector caspases CASP3, CASP4, CASP6, CASP7, CASP9 and CASP10 (PubMed: 16916640, PubMed: 8962078, PubMed: 9006941). Binding to the adapter molecule FADD recruits it to either receptor FAS/TNFRSF6 or TNFRSF1A (PubMed: 8681376, PubMed: 8681377). The resulting aggregate called the death-inducing signaling complex (DISC) performs CASP8 proteolytic activation (PubMed: 9184224). The active dimeric enzyme is then liberated from the DISC and free to activate downstream apoptotic proteases (PubMed: 9184224). Proteolytic fragments of the N-terminal propeptide (termed CAP3, CAP5 and CAP6) are likely retained in the DISC (PubMed: 9184224). 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: 31827280, PubMed: 31827281). 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: 32929201, PubMed: 34012073). 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:8755496). Cleaves PARP1 and PARP2 (PubMed:8681376). Independent of its protease activity, promotes cell migration following phosphorylation at Tyr-380 (PubMed:18216014, PubMed:27109099).

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

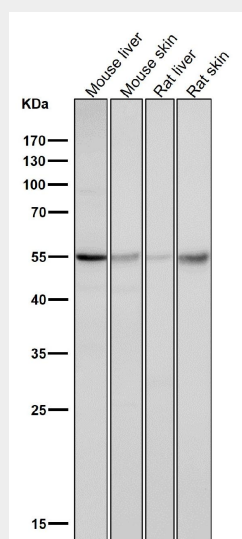
Isoform 1, isoform 5 and isoform 7 are expressed in a wide variety of tissues. Highest expression in peripheral blood leukocytes, spleen, thymus and liver. Barely detectable in brain, testis and skeletal muscle

Anti-Caspase-8 CASP8 Rabbit Monoclonal Antibody - Protocols

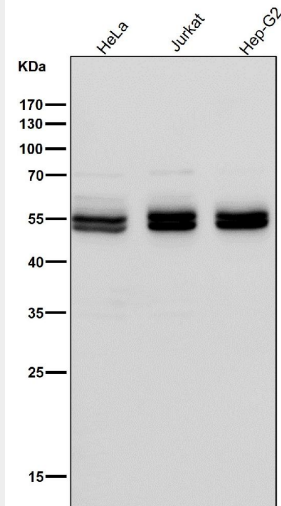
Provided below are standard protocols that you may find useful for product applications.

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

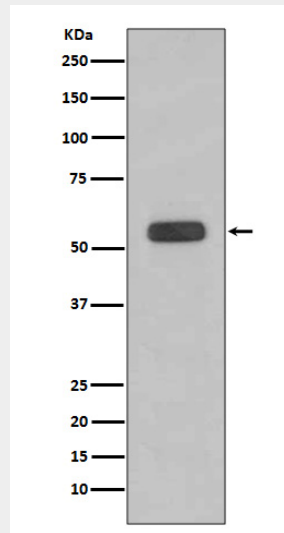
Anti-Caspase-8 CASP8 Rabbit Monoclonal Antibody - Images



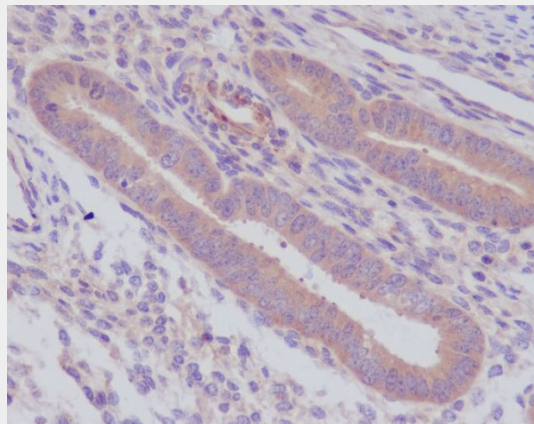
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



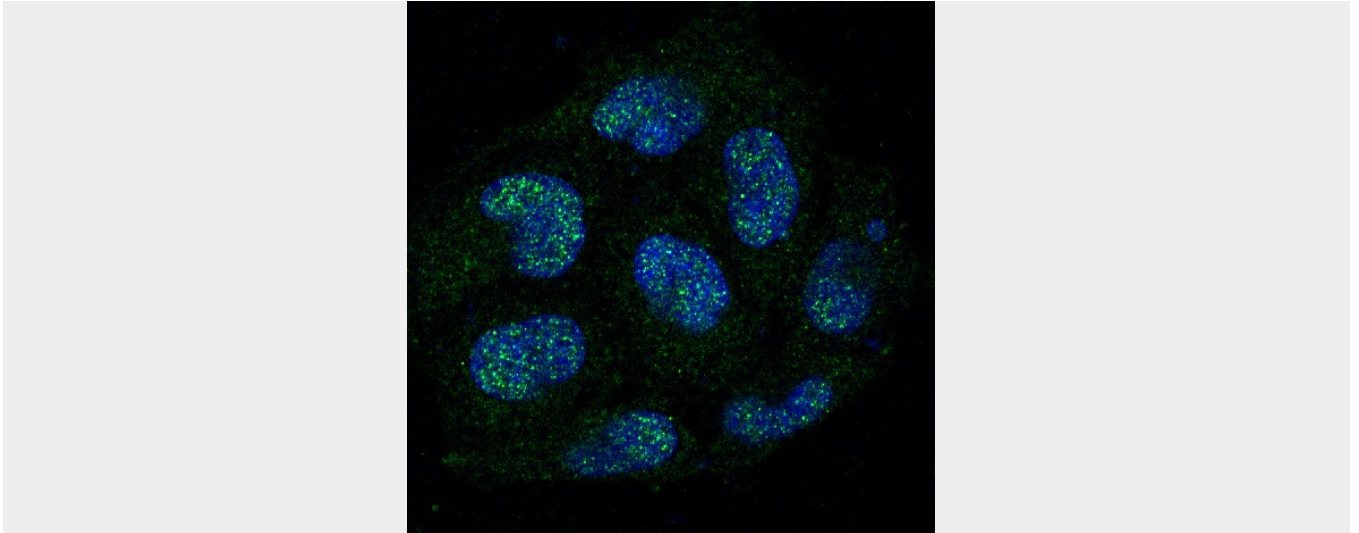
All lanes use the Antibody at 1:1K dilution for 1 hour at room temperature.



Western blot analysis of Caspase-8 expression in HeLa cell lysate.



Immunohistochemical analysis of paraffin-embedded human uterus, using Caspase-8 Antibody.



Immunofluorescent analysis of HeLa cells, using Caspase-8 Antibody.