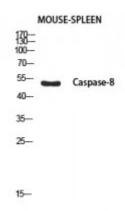


Anti-Cleaved-Caspase-8 p18 (S217) antibody





Description Caspase-8 is a protein encoded by the CASP8 gene which is

approximately 55,3 kDa. Caspase-8 is localised to the cytoplasm and is involved in the TNFR1 pathway, dimerization of procaspase-8, activated TLR4 signalling, apoptosis signalling and toll-like receptor signalling pathways. This protein falls under the cysteine-aspartic acid protease family. It pays a role in the programmed cell death induced by Fas and various apoptotic stimuli. Caspase-8 isoform 1, 5 and 7 are expressed in a wide variety of tissues. Mutations in the CASP8 gene may result in a caspase-8 deficiency. STJ97641 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of fragment of activated caspase-8 p18 protein resulting from cleavage adjacent to S217.

Model STJ97641

Host Rabbit

Reactivity Human

Applications ELISA, IF, WB

Immunogen Synthesized peptide derived from human Cleaved-Caspase-8 p18 (S217)

Immunogen Region 170-250 aa, Internal

Gene ID <u>841</u>

Gene Symbol CASP8

Dilution range WB 1:500-1:2000ELISA 1:10000

Specificity Cleaved-Caspase-8 p18 (S217) Polyclonal Antibody detects endogenous

levels of Cleaved-Caspase-8 p18 (S217) protein.

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.

Purification The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Caspase-8 CASP-8 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

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links HGNC:1509OMIM:211980

Alternative Names Caspase-8 CASP-8 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

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.

Sequence and Domain Family Isoform 9 contains a N-terminal extension that is required for interaction with

the BCAP31 complex.

Cellular Localization Cytoplasm.

Post-translational Generation of the subunits requires association with the death-inducing **Modifications** 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.

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