

Product datasheet

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ARG66783 anti-Caspase 8 (p18) antibody

Package: 100 μg Store at: -20°C

Summary

Product Description Rabbit Polyclonal antibody recognizes Caspase 8 (p18)

Tested Reactivity Hu

Predict Reactivity Ms, Rat
Tested Application WB

Specificity This antibody reacts to full-length and p18 fragment of Caspase 8.

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name Caspase 8 (p18)

Species Human

Immunogen Synthetic peptide derived from Human Caspase 8 (p18).

Conjugation Un-conjugated

Alternate Names Casp-8; FADD-like ICE; EC 3.4.22.61; CAP4; ICE-like apoptotic protease 5; MORT1-associated ced-3

homolog; FLICE; Apoptotic cysteine protease; FADD-homologous ICE/ced-3-like protease; Caspase-8;

Apoptotic protease Mch-5; CASP-8; MCH5; ALPS2B; MACH

Application Instructions

Application table	Application	Dilution
	WB	1:500 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa cells untreated or treated with Camptothecin.	
Observed Size	~ 57 kDa (full-length), ~ 18 kDa (p18 fragment)	

Properties

Form Liquid

Purification Affinity purification with immunogen.

Buffer PBS, 0.02% Sodium azide, 50% Glycerol and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol and 0.5% BSA

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Background

Function

PTM

Gene Symbol CASP8

Gene Full Name caspase 8, apoptosis-related cysteine peptidase

This gene encodes a member of the cysteine-aspartic acid protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes composed of a prodomain, a large protease subunit, and a small protease subunit. Activation of caspases requires proteolytic processing at conserved internal aspartic residues to generate a heterodimeric enzyme consisting of the large and small subunits. This protein is involved in the programmed cell death induced by Fas and various apoptotic stimuli. The N-terminal FADD-like death effector domain of this protein suggests that it may interact with Fas-interacting protein FADD. This protein was detected in the insoluble fraction of the affected brain region from Huntington disease patients but not in those from normal controls, which implicated the role in neurodegenerative diseases. Many alternatively spliced transcript variants encoding different isoforms have been described, although not all variants have had their full-length sequences determined. [provided by RefSeq, Jul 2008]

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 (PubMed:23516580, PubMed:9006941). Cleaves RIPK1 at 'Asp-325' which is crucial for limiting apoptosis and necroptosis during embryonic

development (By similarity). [UniProt]

Highlight Related news:

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Calculated Mw 55 kDa (full-length), 18 kDa (p18 fragment)

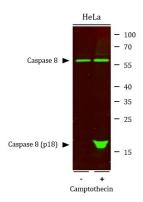
Generation of the subunits requires association with the death-inducing signaling complex (DISC), whereas additional processing is likely due to the autocatalytic activity of the activated protease. GZMB

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. [UniProt]

Cellular Localization Cytoplasm. [UniProt]



ARG66783 anti-Caspase 8 (p18) antibody WB image

Western blot: HeLa cells untreated (left) or treated (right) with 2 mM/ml Camptothecin. Cell lysates were stained with ARG66783 anti-Caspase 8 (p18) antibody at 1:1000 dilution, overnight at $4^{\circ}\text{C}.$