

CASP9 Antibody (S196)

Affinity Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7974a

Product Information

Application	WB, IHC-P, FC, E
Primary Accession	<u>P55211</u>
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB6899
Calculated MW	46281

Additional Information

Gene ID	842
Other Names	Caspase-9, CASP-9, Apoptotic protease Mch-6, Apoptotic protease-activating factor 3, APAF-3, ICE-like apoptotic protease 6, ICE-LAP6, Caspase-9 subunit p35, Caspase-9 subunit p10, CASP9, MCH6
Target/Specificity	This CASP9 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide corresponding to amino acid residues surrounding S196 of human CASP9.
Dilution	WB~~1:1000 IHC-P~~1:100~500 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	CASP9 Antibody (S196) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	CASP9
Synonyms	MCH6
Function	Involved in the activation cascade of caspases responsible for apoptosis

	execution. Binding of caspase-9 to Apaf-1 leads to activation of the protease which then cleaves and activates effector caspases caspase-3 (CASP3) or caspase-7 (CASP7). Promotes DNA damage- induced apoptosis in a ABL1/c-Abl-dependent manner. Proteolytically cleaves poly(ADP-ribose) polymerase (PARP). Cleaves BIRC6 following inhibition of BIRC6-caspase binding by DIABLO/SMAC (PubMed: <u>36758105</u> , PubMed: <u>36758106</u>).
Tissue Location	Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

Background

Caspase 9 is 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 which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme. This protein is processed by caspase APAF1; this step is thought to be one of the earliest in the caspase activation cascade.

References

Martin, M.C., et al., J. Biol. Chem. 280(15):15449-15455 (2005). Raina, D., et al., J. Biol. Chem. 280(12):11147-11151 (2005). Cornelis, S., et al., Oncogene 24(9):1552-1562 (2005). Mohammad, R.M., et al., Mol. Cancer Ther. 4(1):13-21 (2005). Tacconi, S., et al., Exp. Neurol. 190(1):254-262 (2004).

Images



Western blot analysis of anti-CASP9 Antibody (S196) (Cat.#AP7974a) in Jurkat cell line lysates (35ug/lane). CASP9 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human hepatocarcinoma with CASP9 Antibody (S196), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.



Antibody (S196)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

Citations

• Omega-6 Polyunsaturated Fatty Acids Enhance Tumor Aggressiveness in Experimental Lung Cancer Model: Important Role of Oxylipins

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