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CASP9 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7974c

Product Information

Application	IHC-P, IF, WB, E
Primary Accession	P55211
Reactivity	Human, Mouse
Predicted	Rat, Rabbit
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	46281
Antigen Region	183-211

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 between 183-211 amino acids from the Central region of human CASP9.
Dilution	IHC-P~~1:100~500 IF~~1:10~50 WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.
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 (Center) 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:36758105, PubMed:36758106).
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.

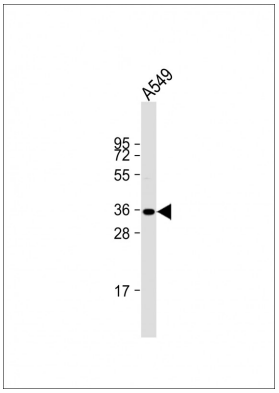
Background

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.

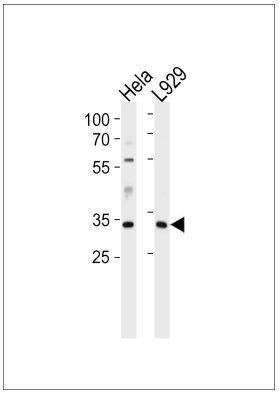
References

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).

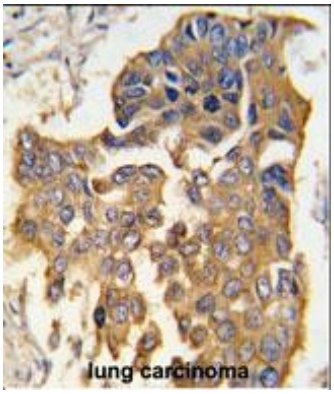
Images



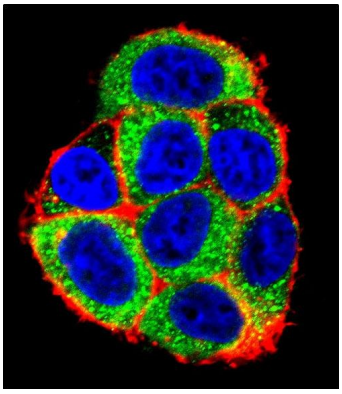
Anti-CASP9 Antibody (Center) at 1:2000 dilution + A549 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 46 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



CASP9 Antibody (Center) (Cat. #AP7974c) western blot analysis in Hela cell line and mouse L929 tissue lysates (35ug/lane).This demonstrates the CASP9 antibody detected the CASP9 protein (arrow).



Formalin-fixed and paraffin-embedded human lung carcinoma tissue reacted with CASP9 antibody (Center) (Cat. #AP7974c), 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.



Confocal immunofluorescent analysis of CASP9 Antibody (Center)(Cat#AP7974c) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.