

CASP9 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP7974c

Specification

CASP9 Antibody (Center) - Product Information

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

CASP9 Antibody (Center) - 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 WB~~1:2000 IF~~1:10~50 IHC-P~~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 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.

CASP9 Antibody (Center) - 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 damageinduced 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

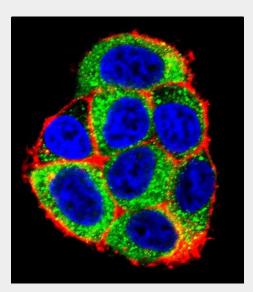
Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

CASP9 Antibody (Center) - Protocols

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

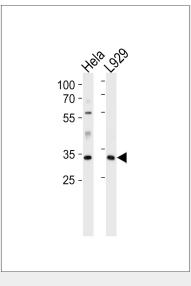
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

CASP9 Antibody (Center) - Images

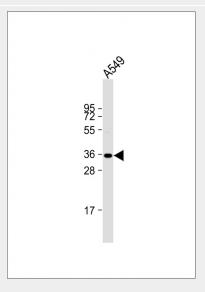


Confocal immunofluorescent analysis of CASP9 Antibody (Center)(Cat#AP7974c) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).

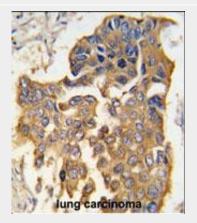




CASP9 Antibody (Center) (Cat. #AP7974c) western blot analysis in Hela cell line and mouse L929 tissue lysates (35ug/lane). This demonstrates the CASP9 antibody detected the CASP9 protein (arrow).



Anti-CASP9 Antibody (Center) at 1:2000 dilution + A549 whole cell lysate Lysates/proteins at 20 μ g 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.



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.

CASP9 Antibody (Center) - 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.

CASP9 Antibody (Center) - 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).