

### **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**

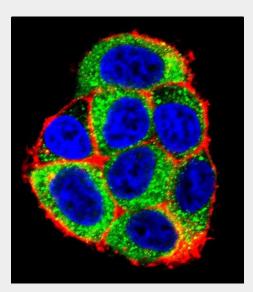
Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

## **CASP9 Antibody (Center) - Protocols**

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

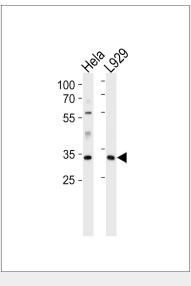
- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

### **CASP9 Antibody (Center) - Images**

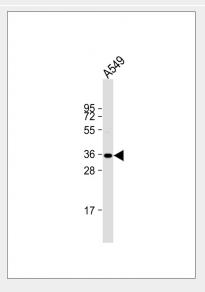


Confocal immunofluorescent analysis of CASP9 Antibody (Center)(Cat#AP7974c) with Hela cell followed by Alexa Fluor 488-conjugated goat anti-rabbit IgG (green). Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).DAPI was used to stain the cell nuclear (blue).

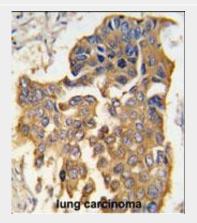




CASP9 Antibody (Center) (Cat. #AP7974c) western blot analysis in Hela cell line and mouse L929 tissue lysates (35ug/lane). This demonstrates the CASP9 antibody detected the CASP9 protein (arrow).



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