

### Caspase-9 Antibody

Catalog # ASC10049

### **Specification**

# **Caspase-9 Antibody - Product Information**

Application
Primary Accession
Other Accession
Reactivity
Host

Clonality Isotype

Calculated MW

Application Notes

WB, IF, ICC, E, IP

P55211 P55211, 842 Human Rabbit Polyclonal

Predicted: 46 kDa

Observed: 45 kDa KDa

Caspase-9 antibody can be used for detection of caspase-9 by Western blot at 1  $\mu$ g/mL. Antibody can also be used for immunocytochemistry starting at 5  $\mu$ g/mL. For immunofluorescence start at 5  $\mu$ g/mL.

# **Caspase-9 Antibody - Additional Information**

Gene ID 842

**Other Names** 

Caspase-9 Antibody: MCH6, APAF3, APAF-3, PPP1R56, ICE-LAP6, MCH6, Caspase-9, Apoptotic protease Mch-6, CASP-9, caspase 9, apoptosis-related cysteine peptidase

#### Target/Specificity

Caspase-9 antibody was raised against a 20 amino acid peptide near the center of human Caspase-9. <a href="https://doi.org/10.2016/near-10.2016/">https://doi.org/10.2016/near-10.2016/near

#### **Reconstitution & Storage**

Caspase-9 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

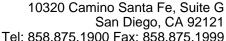
Caspase-9 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Caspase-9 Antibody - Protein Information**

Name CASP9

**Synonyms MCH6** 

**Function** 





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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:<a href="http://www.uniprot.org/citations/36758105" target="\_blank">36758105</a>, PubMed:<a href="http://www.uniprot.org/citations/36758106" target="\_blank">36758106</a>).

# **Tissue Location**

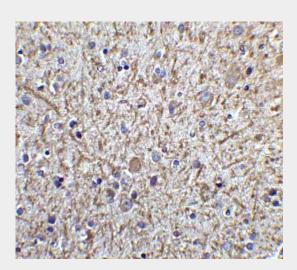
Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

# **Caspase-9 Antibody - Protocols**

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

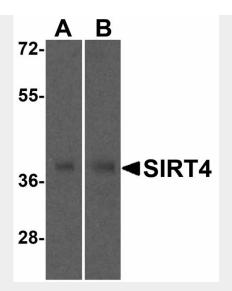
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

### Caspase-9 Antibody - Images



Immunohistochemistry of TOLLIP in human brain tissue with TOLLIP antibody at 5 µg/ml.





Western blot analysis of SIRT4 in (A) human and (B) mouse liver tissue lysate with SIRT4 antibody at 0.5  $\mu\text{g/mL}$ 

# Caspase-9 Antibody - Background

Caspase-9 Antibody: Apoptosis is related to many diseases and induced by a family of cell death receptors and their ligands. Cell death signals are transduced by death domain containing adapter molecules and members of the caspase family of proteases. A novel member in the caspase family was recently identified and designated ICE-LAP6, Mch6, and Apaf-3. Caspase-9 and Apaf-1 bind to each other, which leads to caspase-9 activation. Caspase-9 is also activated by granzyme B and CPP32. Activated caspase-9 cleaves and activates caspase-3 that is one of the key proteases, being responsible for the proteolytic cleavage of many key proteins in apoptosis. Caspase-9 play a central role in cell death induced by a wide variety of apoptosis activators including TNFα, TRAIL, anti-CD-95, FADD, and TRADD. Caspase-9 is expressed in a variety of human tissues.

# Caspase-9 Antibody - References

Duan H, Orth K, Chinnaiyan AM, et al. ICE-LAP6, a novel member of the ICE/Ced-3 gene family, is activated by the cytotoxic T cell protease granzyme B. J. Biol. Chem. 1996; 271:16720-4 Srinivasula SM, Fernandes-Alnemri T, Zangrilli J, et al. The Ced-3/interleukin 1 $\beta$  converting enzyme-like homolog Mch6 and the lamin-cleaving enzyme Mch2 $\alpha$  are substrates for the apoptotic mediator CPP32. J. Biol. Chem. 1996; 271:27099-106