10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Caspase-9 Antibody
Catalog # ASC10049

Specification

Caspase-9 Antibody - Product Information

Application	**IHC, WB**
Primary Accession	P55211
Other Accession	P55211, 842
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 46 kDa** **Observed: 45 kDa KDa**
Application Notes	**Caspase-9 antibody can be used for detection of caspase-9 by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 5 µg/mL. For immunofluorescence start at 5 µg/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.

The immunogen is located within amino acids 290 - 340 of Caspase-9.

Reconstitution & Storage
Caspase-9 antibody can be stored at 4℃ for three months and -20℃, 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

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).

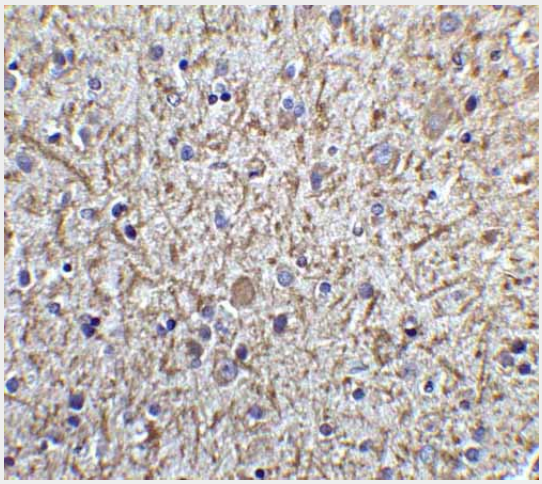
Tissue Location
Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

Caspase-9 Antibody - Protocols

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

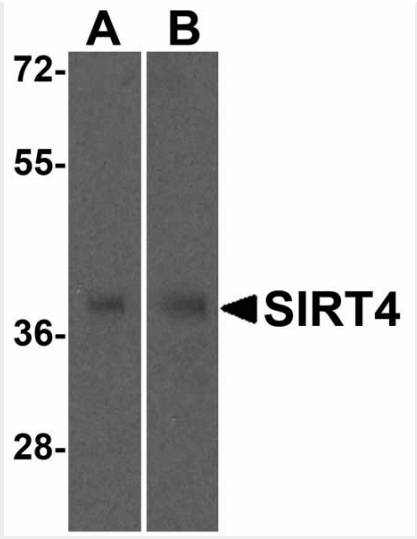
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Caspase-9 Antibody - Images



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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blot analysis of SIRT4 in (A) human and (B) mouse liver tissue lysate with SIRT4 antibody at 0.5 µg/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 1β converting enzyme-like homolog Mch6 and the lamin-cleaving enzyme Mch2α are substrates for the apoptotic mediator CPP32. J. Biol. Chem. 1996; 271:27099-106