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Caspase-9 Antibody
Catalog # ASC10048

Specification

Caspase-9 Antibody - Product Information

Application	**WB**
Primary Accession	P55211
Other Accession	P55211, 28558771
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**46 kDa KDa**
Application Notes	**Caspase-9 antibody can be used for detection of caspase-9 by Western blot at 1:1000 dilution. A 46 kDa band should be detected.**

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
CASP9; It has no cross response to other members in caspase family.

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).

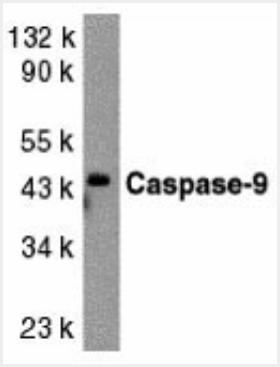
Tissue Location
Ubiquitous, with highest expression in the heart, moderate expression in liver, skeletal muscle, and pancreas. Low levels in all other tissues. Within the heart, specifically expressed in myocytes.

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



Western blot analysis of caspase-9 in HeLa whole cell lysate with caspase-9 antibody at 1:1000 dilution.

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, Poirier GG, Froelich CJ, He WW, Dixit VM. 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, Robertson N, Armstrong RC, Wang L, Trapani JA, Tomaselli KJ, Litwack G, Alnemri ES. 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
Li P, Nijhawan D, Budihardjo I, Srinivasula SM, Ahmad M, Alnemri ES, Wang X. Cytochrome c and dATP-dependent formation of Apaf-1/caspase-9 complex initiates an apoptotic protease cascade. Cell 1997;91:479-89
Pan G, O'Rourke K, Dixit VM. Caspase-9, Bcl-XL, and Apaf-1 form a ternary complex. J Biol Chem 1998;273:5841-5 (RD1299)