

# Caspase-10 Antibody

Catalog # ASC10015

## **Specification**

# Caspase-10 Antibody - Product Information

Application WB, E
Primary Accession O92851
Other Accession AAD28402, 843
Reactivity Human
Host Rabbit
Clonality Polyclonal

lsotype IgG

Application Notes

Caspase-10 antibody can be used for detection of caspase-10 by Western blot 1 µg/mL. A 59 kDa band can be detected.

## Caspase-10 Antibody - Additional Information

Gene ID 843

**Other Names** 

Caspase-10 Antibody: MCH4, Caspase-10, Apoptotic protease Mch-4, CASP-10, caspase 10, apoptosis-related cysteine peptidase

#### Target/Specificity

Caspase-10 antibody was raised against a 17 amino acid peptide near the carboxy terminus of human Caspase-10.<br/>
The immunogen is located within amino acids 240 - 290 of Caspase-10.

## **Reconstitution & Storage**

Caspase-10 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-10 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### Caspase-10 Antibody - Protein Information

Name CASP10

Synonyms MCH4

#### **Function**

Involved in the activation cascade of caspases responsible for apoptosis execution. Recruited to both Fas- and TNFR-1 receptors in a FADD dependent manner. May participate in the granzyme B apoptotic pathways. Cleaves and activates effector caspases CASP3, CASP4, CASP6, CASP7, CASP8 and CASP9. Hydrolyzes the small- molecule substrates, Tyr- Val-Ala-Asp-|-AMC and



Asp-Glu-Val-Asp-|-AMC.

#### **Tissue Location**

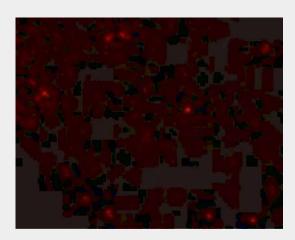
Detectable in most tissues. Lowest expression is seen in brain, kidney, prostate, testis and colon

### Caspase-10 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-10 Antibody - Images



Immunofluorescence of OCLN in Human Liver tissue with OCLN antibody at 20 µg/mL.

## Caspase-10 Antibody - Background

Caspase-10 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 (DD)- containing adapter molecules and members of the ICE/CED-3 protease family. A novel ICE/CED-3 protease was identified recently, designated FLICE2 and Mch4 and renamed as caspase-10. Caspase-10 has two death effector domains (DEDs) that bind to the DED in the adapter molecule FADD and recruits both TNFR1 and CD95 to form complexes with these receptors. Caspase-10 is therefore involved in the CD95 and TNFR1 induced apoptosis. Caspase-10 cleaves and activates caspase-3, -4, -6, -7, -8 and -9, which causes the proteolytic cleavage of many key proteins such as PARP. Cleavage of PARP occurs in many different systems during apoptosis and is the hallmark of programmed cell death. Caspase-10 is expressed in many tissues and cell lines.

## Caspase-10 Antibody - References

Vincenz.C. and Dixit,V.M. Fas-associated death domain protein interleukin-1β-converting enzyme 2 (FLICE2), an ICE/Ced-3 homologue, is proximally involved in CD95- and p55-mediated death signaling. J. Biol. Chem. 1997;272:6578-6583





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Fernandes-Alnemri T, Armstrong RC, Krebs J, Srinivasula SM, Wang L Bullrich F, Fritz LC, Trapani JA, Tomaselli KJ, Litwack G, Alnemri ES. In vitro activation of CPP32 and Mch3 by Mch4, a novel human apoptotic cysteine protease containing two FADD-like domains. Proc. Natl. Acad. Sci. USA. 1996;93:7464-7469

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