

## Caspase-7 Antibody Catalog # ASC10299

## **Specification**

#### **Caspase-7 Antibody - Product Information**

Application Primary Accession Other Accession Reactivity

Host Clonality Isotype Application Notes **WB, IHC**<u>P55210</u>
<u>P55210</u>, <u>1730092</u>

Human, Mouse, Rat Rabbit Polyclonal IaG

Casp-7 antibody can be used for the detection of Caspase-7 by Western blot at 0.5 to 1 µg/mL. Antibody can also be used for immu nohistochemistry starting at 2 µg/mL.

#### Caspase-7 Antibody - Additional Information

Gene ID 840 Other Names

Caspase-7 Antibody: MCH3, CMH-1, LICE2, CASP-7, ICE-LAP3, MCH3, Caspase-7, Apoptotic protease Mch-3, caspase 7, apoptosis-related cysteine peptidase

#### Target/Specificity

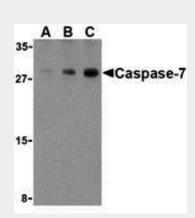
CASP7; Depending on cell lines or tissues used, other cleavage products may be observed.

## **Reconstitution & Storage**

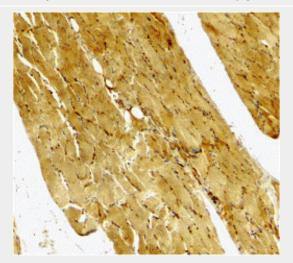
Caspase-7 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

#### **Precautions**

Caspase-7 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.



Western blot analysis of Caspase-7 in human skeletal muscle cell lysate with Caspase-7 antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL.



Immunohistochemical staining of human skeletal muscle using Caspase-7 antibody at 2 µg/mL.

# Caspase-7 Antibody - Background

Caspase-7 Antibody: Caspases are a family of cysteine proteases that can be divided into the apoptotic and inflammatory caspase subfamilies. Unlike the apoptotic caspases, members of the inflammatory subfamily are generally not involved in cell death but are associated with the immune response to microbial pathogens. The apoptotic subfamily





#### **Caspase-7 Antibody - Protein Information**

## Name CASP7

#### **Synonyms MCH3**

#### **Function**

Involved in the activation cascade of caspases responsible for apoptosis execution. Cleaves and activates sterol regulatory element binding proteins (SREBPs). Proteolytically cleaves poly(ADPribose) polymerase (PARP) at a '216-Asp-|-Gly-217' bond. Overexpression promotes programmed cell death.

# Cellular Location Cytoplasm.

## **Tissue Location**

Highly expressed in lung, skeletal muscle, liver, kidney, spleen and heart, and moderately in testis. No expression in the brain

## **Caspase-7 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 Cvtometv
- Cell Culture

can be further divided into initiator caspases, which are activated in response to death signals, and executioner caspases, which are activated by the initiator caspases and are responsible for cleavage of cellular substrates that ultimately lead to cell death. Caspase-7 is an executioner caspase that was identified based on its homology with caspases 1 and 3, as well as the C. elegans cell death protein CED-3. Alternative splicing of Caspase-7 mRNA results in the production of 3 distinct isoforms. Caspase-7 activity can be directly inhibited by XIAP expression.

# **Caspase-7 Antibody - References**

Martinon F and Tschopp J. Inflammatory caspases: linking an intracellular innate immune system to autoinflammatory diseases. Cell 2004; 117:561-74.

Zhivotovsky B and Orrenius S. Caspase-2 function in response to DNA damage. Biochim. Biophys. Res. Comm. 2005; 331:859-67. Wolf BB and Green DR. Suicidal tendencies: apoptotic cell death by caspase family proteinases. J. Biol. Chem. 1999; 274:20049-52.

Juan TSC, McNiece IK, Argento JM, et al. Identification and mapping of Casp7, a cysteine protease resembling CPP32b, Interleukin-1b converting enzyme, and CED-3. Genomics 1997; 40:86-93.