

**Caspase-2 Antibody**  
**Catalog # ASC10292****Specification**

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**Caspase-2 Antibody - Product Information**

Application	IF
Primary Accession	<a href="#">P42575</a>
Other Accession	<a href="#">P42575</a> , <a href="#">835</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Caspase-2 antibody can be used for the detection of caspase-2 by Western blot at 1 µg/mL. Antibody can also be used for immunocytochemistry starting at 2 µg/mL.

**Caspase-2 Antibody - Additional Information**

Gene ID 835

**Other Names**

Caspase-2 Antibody: ICH1, NEDD2, CASP-2, NEDD-2, PPP1R57, ICH1, Caspase-2, Neural precursor cell expressed developmentally down-regulated protein 2, caspase 2, apoptosis-related cysteine peptidase

**Target/Specificity**

Caspase-2 antibody was raised against a 16 amino acid synthetic peptide from the amino-terminus of human Caspase-2. The immunogen is located within the first 50 amino acids of Caspase-2.

**Reconstitution & Storage**

Caspase-2 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-2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Caspase-2 Antibody - Protein Information****Name** CASP2**Synonyms** ICH1, NEDD2**Function**

Involved in the activation cascade of caspases responsible for apoptosis execution. Might function by either activating some proteins required for cell death or inactivating proteins necessary for cell

survival (PubMed:<a href="http://www.uniprot.org/citations/15073321" target="\_blank">15073321</a>). Associates with PIDD1 and CRADD to form the PIDDosome, a complex that activates CASP2 and triggers apoptosis in response to genotoxic stress (PubMed:<a href="http://www.uniprot.org/citations/15073321" target="\_blank">15073321</a>).

#### **Tissue Location**

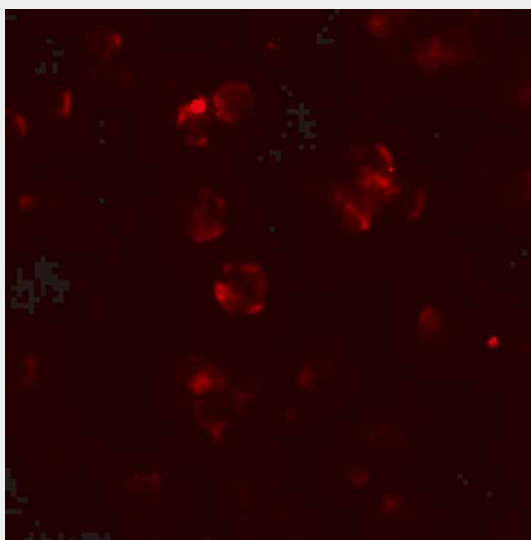
Expressed at higher levels in the embryonic lung, liver and kidney than in the heart and brain. In adults, higher level expression is seen in the placenta, lung, kidney, and pancreas than in the heart, brain, liver and skeletal muscle

### **Caspase-2 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 Cytometry](#)
- [Cell Culture](#)

### **Caspase-2 Antibody - Images**



Immunofluorescence of ABCA7 in 293 cells with ABCA7 antibody at 20 µg/mL.

### **Caspase-2 Antibody - Background**

**Caspase-2 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. Members of this subfamily include caspase-1, -4, -5, and -12 and can activate proinflammatory cytokines such as IL-1 $\beta$  and IL-18. Although phylogenetically similar to this subfamily, Caspase-2 is thought to be involved in stress-induced apoptosis. Caspase-2 has two major isoforms; overexpression on the long form results in apoptosis while that of the short form suppresses cell death.

**Caspase-2 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.

Kuida K, Lippke JA, Ku G, et al. Altered cytokine export and apoptosis in mice deficient in interleukin-1  $\beta$  converting enzyme. *Science* 1995; 267:2000-3.

Gracie JA, Robertson SE, and McInnes IB. Interleukin-18. *J. Leukoc. Biol.* 2003; 73:213-224.