

**Caspase-12 Antibody**  
**Catalog # ASC10119****Specification**

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**Caspase-12 Antibody - Product Information**

|                   |  |
|-------------------|--|
| Application       | WB, IHC, IF  |
| Primary Accession | <a href="#">O08736</a>                             |
| Other Accession   | <a href="#">CAA73532</a> , <a href="#">2094806</a> |
| Reactivity        | Human, Mouse, Rat                                  |
| Host              | Rabbit   |
| Clonality         | Polyclonal   |
| Isotype           | IgG  |
| Calculated MW     | Predicted: 46 kDa                                  |

|                   |   |
|-------------------|---|
| Application Notes | Observed: 55 kDa KDa<br>Caspase-12 antibody can be used for detection of caspase-12 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 10 µg/mL. |
|-------------------|---|

**Caspase-12 Antibody - Additional Information**

|  |       |
|--|-------|
| Gene ID  | 12364 |
| <b>Other Names</b>                                   |       |
| Caspase-12 Antibody: Caspase-12, CASP-12, caspase 12 |       |

**Target/Specificity**  
Casp12;**Reconstitution & Storage**

Caspase-12 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-12 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Caspase-12 Antibody - Protein Information****Name** Casp12**Function**

Involved in the activation cascade of caspases responsible for apoptosis execution.

**Tissue Location**

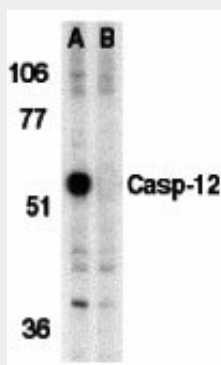
Mainly expressed in skeletal muscle and lung.

## Caspase-12 Antibody - Protocols

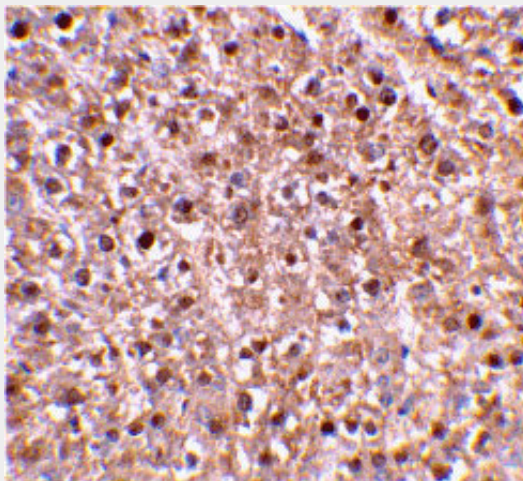
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

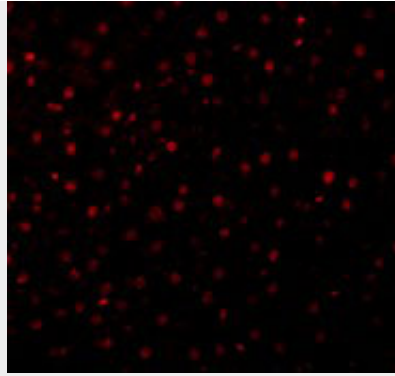
## Caspase-12 Antibody - Images



Western blot analysis of caspase-12 in mouse brain tissue lysate in the absence (A) or presence (B) of blocking peptide with caspase-12 antibody (IN) at 1  $\mu$ g/mL.



Immunohistochemical staining of mouse liver tissue using caspase-12 antibody at 2  $\mu$ g/mL.



Immunofluorescence of Caspase-12 in Mouse Liver cells with Caspase-12 antibody at 10 µg/mL.

### **Caspase-12 Antibody - Background**

Caspase-12 Antibody: Three distinct signaling pathways lead to programmed cell death (apoptosis). The death receptor and mitochondrion pathways are the mains, in which the key apoptotic proteases caspase-8 and caspase-9, respectively, are involved. The endoplasmic reticulum (ER) stress is the third apoptotic pathway and caspase-12 is involved. Caspase-12 is localized to the ER but not to cytoplasm or mitochondrion. Caspase-12 is activated by ER stress, including disruption of ER calcium homeostasis, and mediates ER stress-induced apoptosis. Caspase-12 is co-localized to the ER with several proteins that are involved in Alzheimer's disease including gamma-secretase presenilin and beta-amyloid precursor protein (APP). Caspase-12 mediates cytotoxicity induced by amyloid-beta.

### **Caspase-12 Antibody - References**

Nakagawa T, Zhu Human, Mouse orishima N, et al. Caspase-12 mediates endoplasmic-reticulum-specific apoptosis and cytotoxicity by amyloid- $\beta$ . *Nature* 2000; 403:98-103.  
Mehmet H. Caspases find a new place to hide. *Nature* 2000; 403:29-30  
Van de Craen M, Vandenabeele P, Declercq W, et al. Characterization of seven murine caspase family members. *FEBS Lett* 1997; 403:61-9.