

**Caspase-12 Antibody (Large)**  
**Catalog # ASC10210****Specification**

---

**Caspase-12 Antibody (Large) - 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	<b>Observed: 46 kDa KDa</b> Caspase-12 (large) antibody can be used for the detection of both the propeptide and cleaved forms of caspase-12 by Western blot at 0.5 to 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 10 µg/mL.
-------------------	--

**Caspase-12 Antibody (Large) - Additional Information**

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

**Target/Specificity**

Casp12; Caspase-12 (large) antibody is predicted to have no cross reactivity to other members in the caspase family.

**Reconstitution & Storage**

Caspase-12 (Large) antibody can be stored at -20°C, stable for 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 (Large) is for research use only and not for use in diagnostic or therapeutic procedures.

**Caspase-12 Antibody (Large) - Protein Information**

**Name** Casp12

**Function**

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

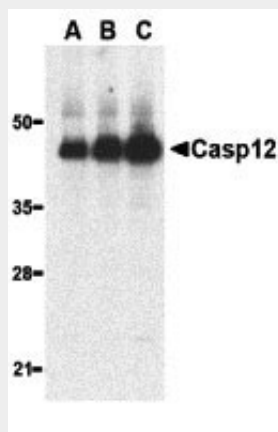
**Tissue Location**

Mainly expressed in skeletal muscle and lung.

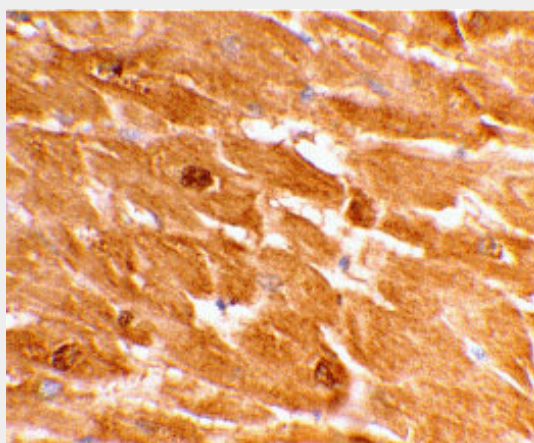
**Caspase-12 Antibody (Large) - Protocols**

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

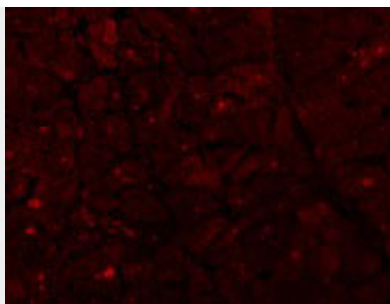
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Caspase-12 Antibody (Large) - Images**

Western blot analysis of caspase-12 in human heart lysate with caspase-12 antibody at (A) 0.5, (B) 1, and (C) 2  $\mu\text{g/mL}$ , respectively.



Immunohistochemical staining of human heart tissue using caspase-12 antibody at 2  $\mu\text{g/mL}$ .



Immunofluorescence of Caspase-12 in Human Heart tissue with Caspase-12 antibody at 10  $\mu\text{g/mL}$ .

#### **Caspase-12 Antibody (Large) - Background**

Caspase-12 Antibody: (Large) Three distinct signaling pathways lead to programmed cell death (apoptosis). The death receptor and mitochondrion pathways are the main, 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 is ubiquitously expressed in mouse tissues.

#### **Caspase-12 Antibody (Large) - References**

Nakagawa T, Zhu H, Morishima 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