

Caspase-12 Antibody (Large)

Catalog # ASC10210

Specification

Caspase-12 Antibody (Large) - Product Information

Application: WB, IHC, IF
Primary Accession: [O08736](#)
Other Accession: [CAA73532](#), [2094806](#)
Reactivity: Human, Mouse, Rat
Host: Rabbit
Clonality: Polyclonal
Isotype: IgG
Calculated MW: Predicted: 46 kDa

Observed: 46 kDa
KDa
Application Notes: 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.

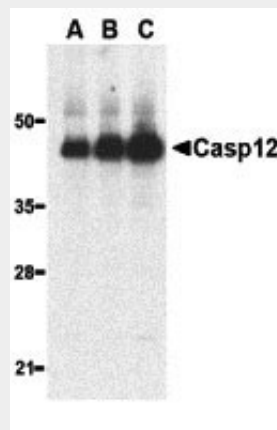
Caspase-12 Antibody (Large) - Additional Information

Gene ID: 12364
Other Names: Caspase-12 (Large) Antibody; Caspase-12, CASP-12, caspase 12

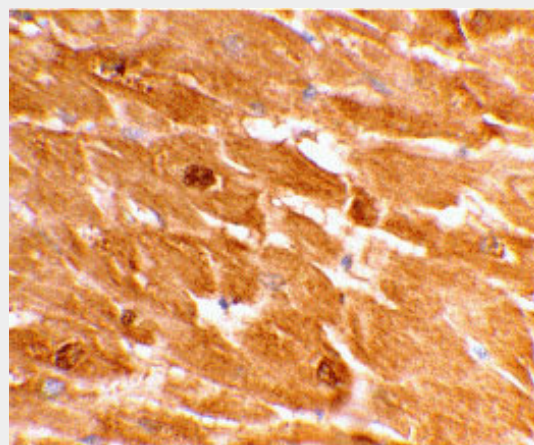
Target/Specificity

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

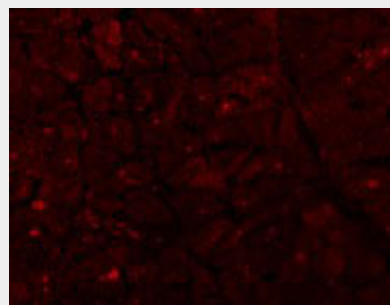
Reconstitution & Storage



Western blot analysis of caspase-12 in human heart lysate with caspase-12 antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL, respectively.



Immunohistochemical staining of human heart tissue using caspase-12 antibody at 2 µg/mL.



Immunofluorescence of Caspase-12 in

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.

Human Heart tissue with Caspase-12 antibody at 10 µg/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-β. *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

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](#)