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Caspase-12 Antibody
Catalog # ASC10118

Specification

Caspase-12 Antibody - Product Information

Application	**WB, IHC**
Primary Accession	O08736
Other Accession	CAA73532, 2094806
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 46 kDa** **Observed: 52 kDa KDa**
Application Notes	**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 10 µg/mL.**

Caspase-12 Antibody - Additional Information

Gene ID **12364**

Other Names
Caspase-12 Antibody: Caspase-12, CASP-12, caspase 12

Target/Specificity
Casp12;

Reconstitution & Storage
Caspase-12 antibody can be stored at 4℃ for three months and -20℃, 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.

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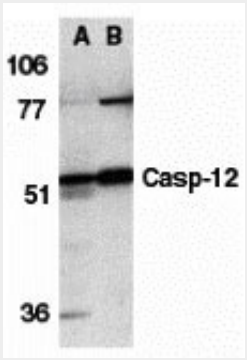
Caspase-12 Antibody - Protocols

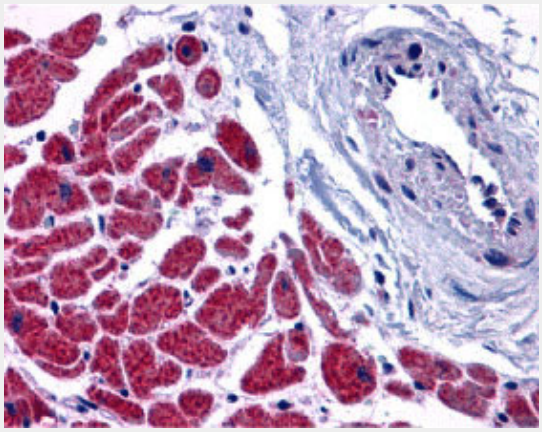
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Caspase-12 Antibody - Images



Western blot analysis of caspase-12 in (A) human and (B) mouse spleen tissue lysates with caspase-12 antibody at 1 µg/mL.



Immunohistochemistry of caspase-12 in human heart tissue 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 capase-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 - 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