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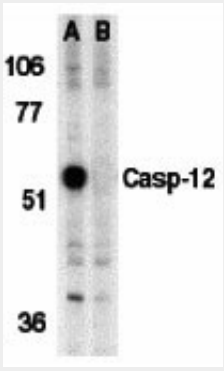
Caspase-12 Antibody
Catalog # ASC10119

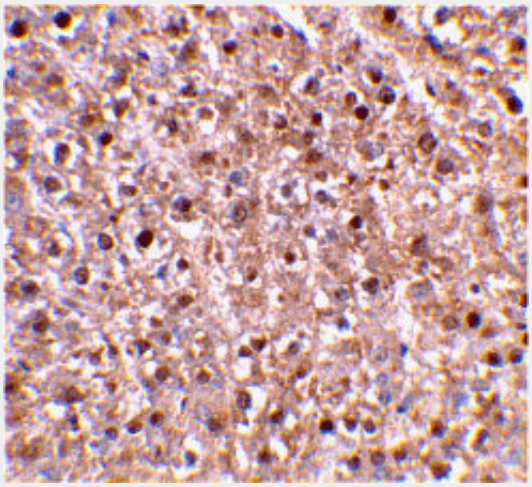
Specification

Caspase-12 Antibody - Product Information

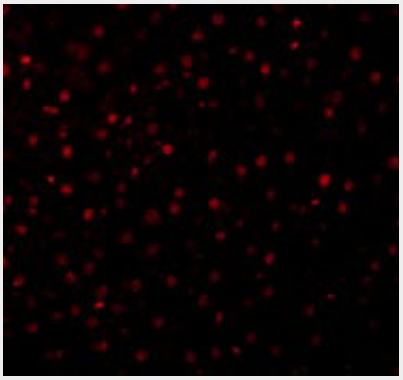
Application	**WB, IHC, IF**
Primary Accession	O08736
Other Accession	CAA73532, 2094806
Reactivity	**Human, Mouse, Rat**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**IgG**
Calculated MW	**Predicted: 46 kDa** **Observed: 55 kDa KDa**
Application Notes	**Caspase-12 antibody can be used for detection of caspase-12 by Western blot at 1 µg/mL. Antibody can also be used for immunohistochemistry starting at 2 µg/mL. For immunofluorescence start at 10 µg/mL.**



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 µg/mL.



Immunohistochemical staining of mouse liver tissue using caspase-12 antibody at 2 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.

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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 Cytomety
- Cell Culture

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 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 Antibody - References

Nakagawa T, Zhu Human, Mouseorishima N, el 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.