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Caspase-12 Antibody (Large)

Catalog # ASC10210

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	O08736
Other Accession	CAA73532, 2094806
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	47854
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
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 □g/mL. Antibody can also be used for immunohistochemistry starting at 2 □g/mL. For immunofluorescence start at 10 □g/mL.

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	Caspase-12 (Large) antibody can be stored at -20℃, 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.

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.

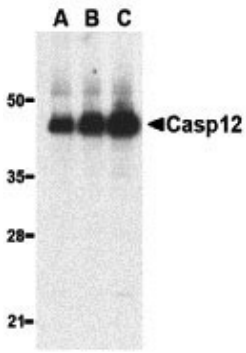
Background

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 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.

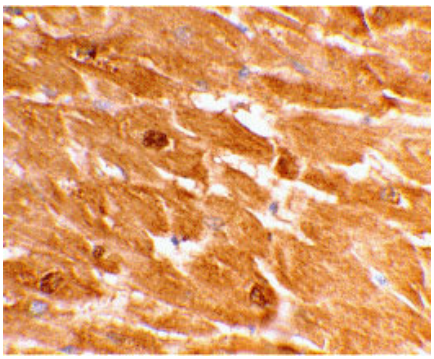
References

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

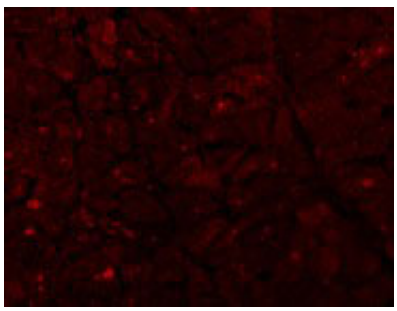
Images



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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.