

Anti-Caspase-12 (NT)

CATALOG No.: PX036A
PX036B

SIZE: 100 µg
0.5 mg

BACKGROUND:

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 caspase-8 and caspase-9, respectively, are involved. The endoplasmic reticulum (ER) stress is the third apoptotic pathway and caspase-12 is involved (1,2). 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 γ -secretase presenilin and β -amyloid precursor protein (APP). Caspase-12 mediates cytotoxicity induced by amyloid- β . Caspase-12 is ubiquitously expressed in mouse tissues (1).

SOURCE:

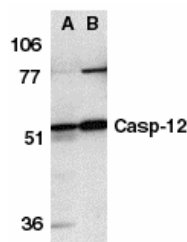
Rabbit anti-caspase-12 (NT) polyclonal antibody was raised against a peptide (AARRTHERDPIYKIKG) corresponding to amino acids 2 to 17 of murine caspase-12 (3).

APPLICATION:

This polyclonal antibody can be used for detection of caspase-12 by Western blot at 0.5 to 1 µg/ml. Murine spleen tissue lysate can be used as positive control. It is human, mouse, and rat reactive. For research use only.

STORAGE:

It is supplied as immunoaffinity chromatography purified IgG, 100 µg in 200 µl of PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



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

RELATED PRODUCTS:

Blocking peptide, 50 µg at 200 µg/ml, is available for competition studies.

Murine spleen tissue lysate, 200 µg at 2 mg/ml, is available for positive control.

REFERENCES:

1. Nakagawa T, Zhu H, Morishima N, Li E, Xu J, Yankner BA, Yuan J. Caspase-12 mediates endoplasmic-reticulum-specific apoptosis and cytotoxicity by amyloid-beta. *Nature* 2000;403:98-103.
2. Mehmet H. Caspases find a new place to hide. *Nature* 2000;403:29-30
3. Van de Craen M, Vandenabeele P, Declercq W, Van den Brande I, Van Loo G, Molemans F, Schotte P, Van Crielinge W, Beyaert R, Fiers W. Characterization of seven murine caspase family members. *FEBS Lett* 1997;403:61-9

CAUTION: NOT FOR USE IN HUMANS. FOR RESEARCH PURPOSES ONLY.



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