

Caspase-1 Antibody

Caspase-1 (CT): ICE, IL-1 β converting enzyme

CATALOG NO.: 3459

BACKGROUND:

Caspases are a family of cysteine proteases that can be divided into the apoptotic and inflammatory caspase subfamilies. Unlike the apoptotic caspases, members of the inflammatory subfamily are generally not involved in cell death but are associated with the immune response to microbial pathogens (reviewed in 1 and 2). Members of this subfamily include caspase-1, -4, -5, and -12 and can activate proinflammatory cytokines such as IL-1 β and IL-18 (3,4). Caspase-1 was initially identified as an IL-1 β -converting enzyme (5); later experiments revealed it to be a mammalian homolog of the *C. elegans* cell death gene *ced-3* (6) whose overexpression can induce apoptosis in fibroblasts (7).

SOURCE:

Rabbit polyclonal caspase-1 antibody was raised against a 16 amino acid peptide from near the carboxy-terminus of human caspase-1 (Genbank accession No. NP_150634).

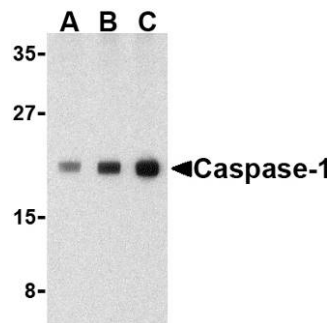
APPLICATION:

Caspase-1 antibody can be used for the detection of caspase-1 by Western blot at 0.5 μ g/ml. (Optimal dilution should be determined by user.) Human heart cell lysate can be used as positive control. Caspase-1 antibody is human specific. Depending on cell lines or tissues used, non-cleaved or other cleavage products may be observed.

This product is for research use only.

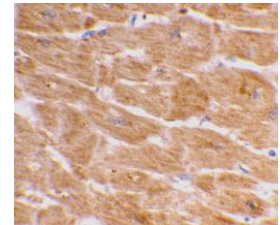
STORAGE:

Caspase-1 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of caspase-1 in human heart cell lysate with caspase-1 antibody at (A) 0.5, (B) 1, and (C) 2 μ g/ml.

Immunohistochemical staining of human heart tissue using caspase-1 antibody at 2 μ g/ml.



RELATED PRODUCTS:

Blocking peptide, Catalog No. **3459P**.

Human Heart Cell Lysate, Catalog No. **1301**.

Caspase-1 Antibody (IN), Catalog No. **3463**.

Caspase-5 Antibody (IN), Catalog No. **3457**.

REFERENCES:

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3. Kuida K, Lippke JA, Ku G, et al. Altered cytokine export and apoptosis in mice deficient in interleukin-1 beta converting enzyme. *Science* 1995; 267:2000-3.
4. Gracie JA, Robertson SE, and McInnes IB. Interleukin-18. *J. Leukoc. Biol.* 2003; 73:213-224.
5. Kostura MJ, Tocci MJ, Limjuco G., et al. Identification of a monocyte specific pre-interleukin 1 beta convertase activity. *Proc. Natl. Acad. Sci. USA* 1989; 86:5227-31.
6. Yuan J, Shaham S, Ledoux S, et al. The *C. elegans* cell death gene *ced-3* encodes a protein similar to mammalian interleukin-1 beta-converting enzyme. *Cell* 1993;75:641-52.
7. Miura M, Zhu H, Rotello R, et al. Induction of apoptosis in fibroblasts by IL-1 beta-converting enzyme, a mammalian homolog of the *C. elegans* cell death gene *ced-3*. *Cell* 1993; 75:653-60.

(06-02D)