# **Anti-Caspase-1 Antibody**

### R1510-22



**Product Type:** Rabbit polyclonal IgG, primary antibodies

Species reactivity: Human

Applications: IHC-P, FC

Molecular Wt: 45 kDa

Description: Caspase-1, originally designated ICE (for IL-1 converting enzyme), is a member of the

group of caspases with large prodomains. Caspase-1 promotes maturation of interleukin IL-  $1\beta$  and interleukin18 (IL-18) by proteolytic cleavage of precursor forms into biologically active pro-inflamatory cytokines. Active caspase-1, a (p20/p10)2 tetramer, is necessary and sufficient for cleavage of precursor IL-1 as well as for induction of apoptosis in some cell lines. The highly conserved family of caspases mediate many of the morphological and biochemical features of apoptosis, including structural dismantling of cell bodies and nuclei, fragmentation of genomic DNA, destruction of regulatory proteins and propagation of other pro-apoptotic molecules. The human Caspase-1 gene maps to chromosome 2q14 and encodes a cytoplasmic protein expressed in liver, heart, skeletal muscle kidney and testis. Caspase-1 has been implicated in inflammation, septic shock, and other situations such as

wound healing and the growth of certain leukemias.

**Immunogen:** Synthetic peptide within human Caspase-1 aa 162-205.

Positive control: Human spleen tissue, human lung tissue, human liver cancer tissue, Jurkat.

Subcellular location: Cytoplasm

Database links: SwissProt: P29466 Human

**Recommended Dilutions:** 

**IHC-P** 1:50-1:200 **FC** 1:50-1:100

**Storage Buffer:** 1\*PBS (pH7.4), 0.2% BSA, 40% Glycerol. Preservative: 0.05% Sodium Azide.

**Storage Instruction:** Store at  $+4^{\circ}$ C after thawing. Aliquot store at  $-20^{\circ}$ C. Avoid repeated freeze / thaw cycles.

Purity: Immunogen affinity purified.

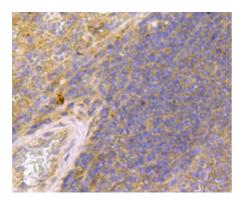
### Hangzhou Huaan Biotechnology Co., Ltd.



Service mail:support@huabio.cn



#### **Images**



**Fig1:** Immunohistochemical analysis of paraffin-embedded human spleen tissue using anti-Caspase-1 antibody. Counter stained with hematoxylin.

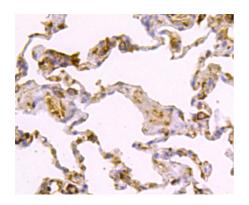
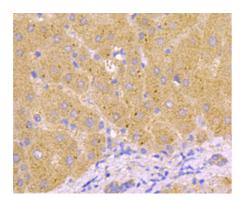


Fig2: Immunohistochemical analysis of paraffin-embedded human lung tissue using anti-Caspase-1 antibody. Counter stained with hematoxylin.



**Fig3:** Immunohistochemical analysis of paraffin-embedded human liver cancer tissue using anti-Caspase-1 antibody. Counter stained with hematoxylin.

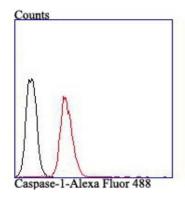


Fig4: Flow cytometric analysis of Jurkat cells with Caspase-1 antibody at 1/100 dilution (red) compared with an unlabelled control (cells without incubation with primary antibody; black). Alexa Fluor 488-conjugated goat anti-rabbit IgG was used as the secondary antibody.

## Hangzhou Huaan Biotechnology Co., Ltd.

Note: All products are "FOR RESEARCH USE ONLY AND ARE NOT INTENDED FOR DIAGNOSTIC OR THERAPEUTIC USE".

#### **Background References**

- 1. Thornberry N A et al. A novel heterodimeric cysteine protease is required for interleukin-1 beta processing in monocytes. Nature 356:768-774 (1992).
- 2. Alnemri E S et al. Cloning and expression of four novel isoforms of human interleukin-1 beta converting enzyme with different apoptotic activities. J Biol Chem 270:4312-4317 (1995).