

## Caspase-1 Rabbit mAb

Catalog No: #48847



Package Size: #48847-1 50ul #48847-2 100ul

Orders: [order@signalwayantibody.com](mailto:order@signalwayantibody.com)Support: [tech@signalwayantibody.com](mailto:tech@signalwayantibody.com)

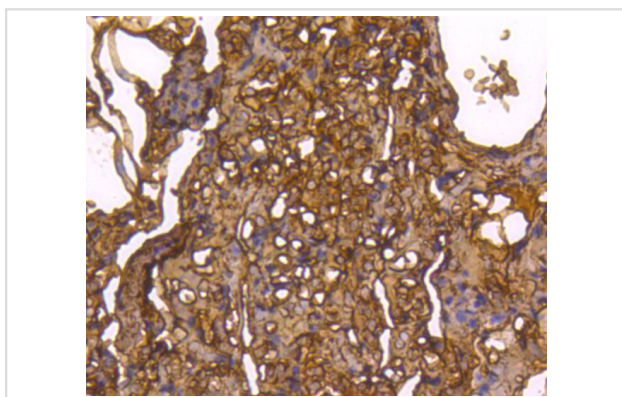
## Description

|                       |   |
|-----------------------|---|
| Product Name          | Caspase-1 Rabbit mAb  |
| Host Species          | Recombinant Rabbit  |
| Clonality             | Monoclonal antibody   |
| Clone No.             | SU40-07   |
| Purification          | ProA affinity purified  |
| Applications          | WB, IHC, FC   |
| Species Reactivity    | Human;Mouse;Rat   |
| Immunogen Description | recombinant protein   |
| Conjugates            | Unconjugated  |
| Other Names           | CASP-1 antibody CASP1 antibody CASP1_HUMAN antibody Caspase 1 antibody Caspase-1 subunit p10 antibody ICE antibody IL-1 beta-converting enzyme antibody IL-1BC antibody IL1 beta converting enzyme antibody IL1B convertase antibody Interleukin 1 beta convertase antibody Interleukin 1B converting enzyme antibody Interleukin-1 beta convertase antibody Interleukin-1 beta-converting enzyme antibody p45 antibody |
| Accession No.         | Swiss-Prot#:P29466  |
| Calculated MW         | 45 kDa  |
| Formulation           | 1*TBS (pH7.4), 1%BSA, 40%Glycerol. Preservative: 0.05% Sodium Azide.  |
| Storage               | Store at -20°C  |

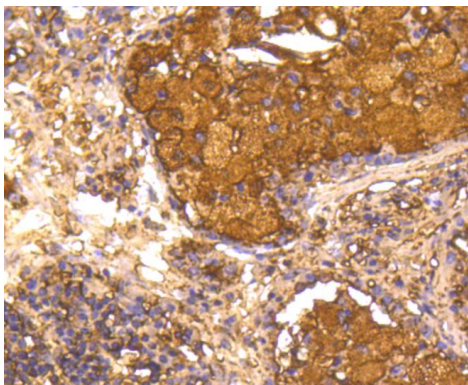
## Application Details

WB: 1:1,000-1:2,000 IHC: 1:50-1:200FC: 1:50-1:100

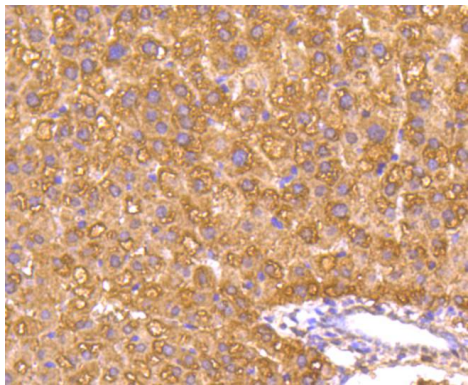
## Images



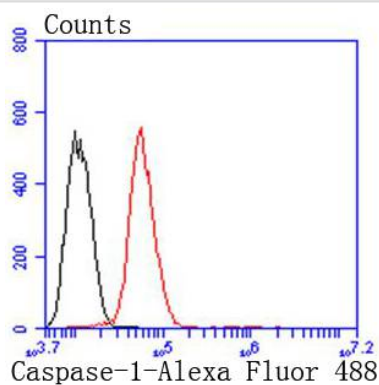
Immunohistochemical analysis of paraffin-embedded human lung tissue using anti-Caspase-1 antibody. Counter stained with hematoxylin.



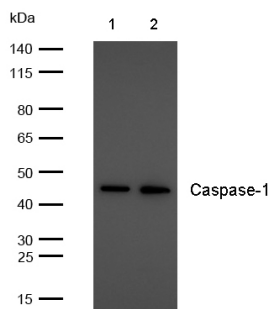
Immunohistochemical analysis of paraffin-embedded human lung cancer tissue using anti-Caspase-1 antibody. Counter stained with hematoxylin.



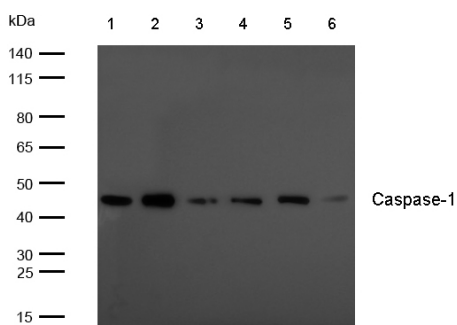
Immunohistochemical analysis of paraffin-embedded mouse liver tissue using anti-Caspase-1 antibody. Counter stained with hematoxylin.



Flow cytometric analysis of HeLa cells with Caspase-1 antibody at 1/50 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.



All lanes : Caspase-1 Rabbit mAb at 1/1k dilution Lane 1 : Jurkat whole cell lysates Lane 2 : THP-1 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution Predicted band size: 45 kDa Observed band size: 45 kDa Exposure time: 7 seconds



All lanes : Caspase-1 Rabbit mAb at 1/1k dilution Lane 1 : HL-60 lysates Lane 2 : Human CAF lysates Lane 3 : HUVEC lysates Lane 4 : PC3 lysates Lane 5 : U14 lysates Lane 6 : 3T3 lysates Lysates/proteins at 20 µg per lane. Secondary All lanes : Goat Anti-Rabbit IgG H&L (HRP) at 1/20000 dilution Predicted band size: 45 kDa Observed band size: 45 kDa Exposure time: 9 seconds

## Background

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-inflammatory 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.

## References

1. Zhao J et al. Synthetic Oligodeoxynucleotides Containing Multiple Telemeric TTAGGG Motifs Suppress Inflammasome Activity in Macrophages Subjected to Oxygen and Glucose Deprivation and Reduce Ischemic Brain Injury in Stroke-Prone Spontaneously Hypertensive Rats. PLoS One 10:e0140772 (2015).
2. Zhang X et al. Porcine Mx1 fused to HIV Tat protein transduction domain (PTD) inhibits classical swine fever virus infection in vitro and in vivo. BMC Vet Res 11:264 (2015).

## Published Papers

el at., Estrogen prevent atherosclerosis by attenuating endothelial cell pyroptosis via activation of estrogen receptor  $\delta$  -mediated autophagy. In J Adv Res on 2020 Aug 24 by

Qinghai Meng, Yu Li,et al..PMID:33364052, , (2021)

[PMID:33364052](#)

Note: This product is for in vitro research use only and is not intended for use in humans or animals.