**Applications** 

WB,IF,IHC,ELISA



# Cleaved Caspase-1 p20 (Asp210) Rabbit pAb

CatalogNo: YC0002 Orthogonal Validated 💽

## **Key Features**

Host Species Reactivity

Rabbit
 Human, Mouse, Rat

MW Isotype
• 25kD (Observed) • IgG

### **Recommended Dilution Ratios**

WB 1:500-2000 IHC 1:50-300 IF 1:50-300

# Storage

**Storage\*** -15°C to -25°C/1 year(Do not lower than -25°C)

**Formulation** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

# **Basic Information**

**Clonality** Polyclonal

# Immunogen Information

**Immunogen** The antiserum was produced against synthesized peptide derived from human

Caspase-1. AA range:161-210

**Specificity** Cleaved-Caspase-1 (D210) Polyclonal Antibody detects endogenous levels of fragment of

activated Caspase-1 protein resulting from cleavage adjacent to D210.

# | Target Information

#### Gene name

CASP1 IL1BC IL1BCE

#### **Protein Name**

Caspase-1

Organism	Gene ID	UniProt ID
Human	<u>834</u> ;	<u>P29466;</u>
Mouse	12362;	<u>P29452;</u>
Rat		<u>P43527;</u>

### Cellular Localization

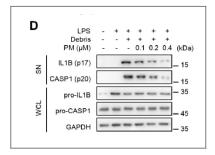
Cytoplasm . Cell membrane .

**Tissue specificity** Expressed in larger amounts in spleen and lung. Detected in liver, heart, small intestine, colon, thymus, prostate, skeletal muscle, peripheral blood leukocytes, kidney and testis. No expression in the brain.

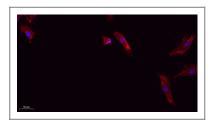
#### **Function**

Alternative products: Additional isoforms seem to exist, Catalytic activity: Strict requirement for an Asp residue at position P1 and has a preferred cleavage sequence of Tyr-Val-Ala-Asp-|-.,enzyme regulation:Specifically inhibited by the cowpox virus Crma protein.,Function:Thiol protease that cleaves IL-1 beta between an Asp and an Ala, releasing the mature cytokine which is involved in a variety of inflammatory processes. Important for defense against pathogens. Cleaves and activates sterol regulatory element binding proteins (SREBPs). Can also promote apoptosis.,PTM:The two subunits are derived from the precursor sequence by an autocatalytic mechanism., similarity: Belongs to the peptidase C14A family., similarity: Contains 1 CARD domain., subunit: Heterotetramer that consists of two antiparallel arranged heterodimers, each one formed by a 20 kDa (p20) and a 10 kDa (p10) subunit. The p20 subunit can also form a heterodimer with the epsilon isoform which then has an inhibitory effect. May be a component of the inflammasome, a protein complex which also includes PYCARD, CARD8 and NALP2 and whose function would be the activation of proinflammatory caspases. Interacts with CARD17/INCA and CARD18., tissue specificity: Expressed in larger amounts in spleen and lung. Detected in liver, heart, small intestine, colon, thymus, prostate, skeletal muscle, peripheral blood leukocytes, kidney and testis. No expression in the brain.,

# Validation Data



Pristimerin suppresses AIM2 inflammasome by modulating AIM2-PYCARD/ASC stability via selective autophagy to alleviate tendinopathy. Autophagy Xiao Yu WB Mouse Achilles tendon Peritoneal macrophages



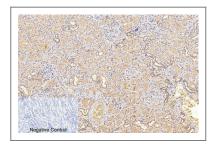
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, DAPI(blue) 10min.



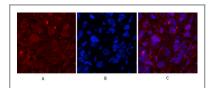
Immunohistochemical analysis of paraffin-embedded Human-breast-cancer tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



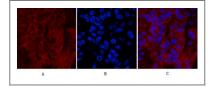
Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



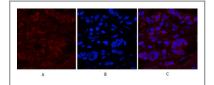
Immunohistochemical analysis of paraffin-embedded Human-kidney tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative control was used by secondary antibody only.



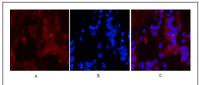
Immunofluorescence analysis of Human-breast-cancer tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Human-liver-cancer tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



Immunofluorescence analysis of Human-stomach-cancer tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B



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Etoposide

Cleaved-Caspase-1 (D210)

Immunofluorescence analysis of Human-stomach-cancer tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture C: merge of A+B

Western Blot analysis of NIH-3T3 cells using Cleaved-Caspase-1 (D210) Polyclonal Antibody diluted at 1:1000

## | Contact information

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Please scan the QR code to access additional product information:
Cleaved Caspase-1
p20 (Asp210) Rabbit

pAb

For Research Use Only. Not for Use in Diagnostic Procedures.

Antibody | ELISA Kits | Protein | Reagents