

Cleaved-Caspase-1 p20 (D210) Polyclonal Antibody

YC0002 Catalog No:

Reactivity: Human; Mouse; Rat

WB;IF;IHC;ELISA **Applications:**

Target: Caspase-1

Fields: >>Necroptosis;>>Neutrophil extracellular trap formation;>>NOD-like receptor

> signaling pathway:>>Cytosolic DNA-sensing pathway:>>C-type lectin receptor signaling pathway;>>Amyotrophic lateral sclerosis;>>Pathogenic Escherichia coli

infection;>>Shigellosis;>>Salmonella

infection;>>Pertussis;>>Legionellosis;>>Yersinia infection;>>Influenza A;>>Coronavirus disease - COVID-19;>>Lipid and atherosclerosis

Gene Name: CASP1

Protein Name: Caspase1

Human Gene Id: 834

Human Swiss Prot

No:

Mouse Swiss Prot

No:

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

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.

P29466

P29452

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

Polyclonal, Rabbit, IgG Source:

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

The antibody was affinity-purified from rabbit antiserum by affinity-

1/7



Purification: chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

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

Observed Band: 25kD

Cell Pathway: NOD-like receptor;Cytosolic DNA-sensing pathway;Amyotrophic lateral sclerosis

(ALS);

Background: This gene encodes a protein which is a member of the cysteine-aspartic acid

protease (caspase) family. Sequential activation of caspases plays a central role in the execution-phase of cell apoptosis. Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce 2 subunits, large and small, that dimerize to form the active enzyme. This gene was identified by its ability to proteolytically cleave and activate the inactive precursor of interleukin-1, a cytokine involved in the processes such as inflammation, septic shock, and wound healing. This gene has been shown to induce cell apoptosis and may function in various developmental stages. Studies of a similar gene in mouse suggest a role in the pathogenesis of Huntington disease. Alternative splicing results in transcript variants encoding distinct isoforms. [provided by

RefSeq, Mar 2012],

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 anti-parallel arranged heterodimers, each one formed by a 20 kDa

(p20) and a 10 kDa (p10) subunit. The p20 subu

Subcellular Location:

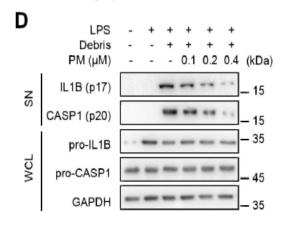
Cytoplasm . Cell membrane .

Expression: Expressed in larger amounts in spleen and lung. Detected in liver, heart, small

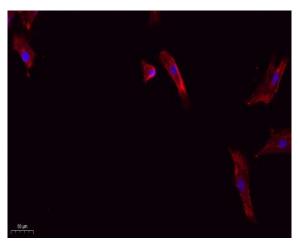
intestine, colon, thymus, prostate, skeletal muscle, peripheral blood leukocytes,

kidney and testis. No expression in the brain.

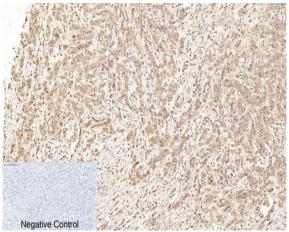
Products Images



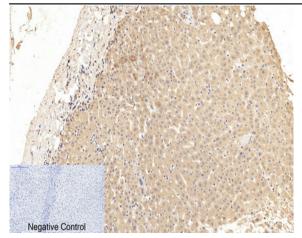
Pristimerin suppresses AIM2 inflammasome by modulating AIM2-PYCARD/ASC stability via selective autophagy to alleviate tendinopathy. Autophagy Xiao Yu WB Mouse Achilles tendon Peritoneal macrophages



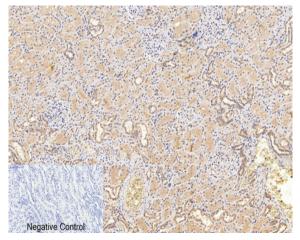
Immunofluorescence analysis of A549. 1,primary Antibody(red) was diluted at 1:200(4°C overnight). 2, Goat Anti Rabbit IgG (H&L) - Alexa Fluor 594 Secondary antibody was diluted at 1:1000(room temperature, 50min).3, Picture B: DAPI(blue) 10min.



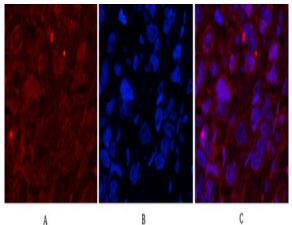
Immunohistochemical analysis of paraffin-embedded Human-breast-cancer tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min).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



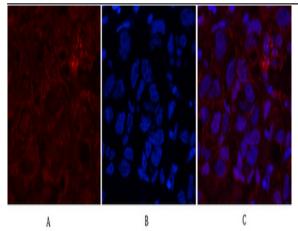
Immunohistochemical analysis of paraffin-embedded Human-liver tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative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



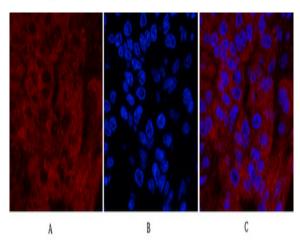
Immunohistochemical analysis of paraffin-embedded Human-kidney tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody was diluted at 1:200(4°C,overnight). 2, Sodium citrate pH 6.0 was used for antibody retrieval(>98°C,20min). 3,Secondary antibody was diluted at 1:200(room tempeRature, 30min). Negative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



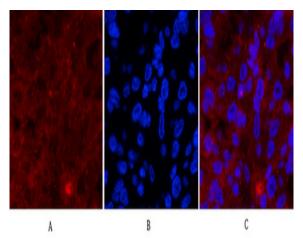
Immunofluorescence analysis of Human-breast-cancer tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture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



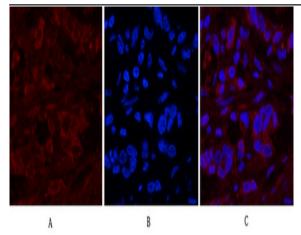
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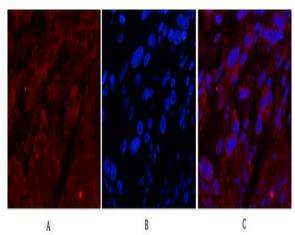
Immunofluorescence analysis of Human-liver-cancer tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture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



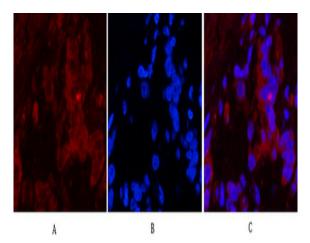
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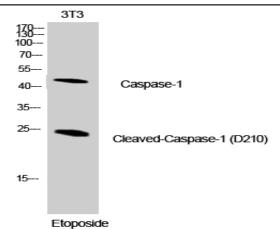
Immunofluorescence analysis of Human-stomach-cancer tissue. 1,Cleaved-Caspase-1 (D210) Polyclonal Antibody(red) was diluted at 1:200(4°C,overnight). 2, Cy3 labled Secondary antibody was diluted at 1:300(room temperature, 50min).3, Picture B: DAPI(blue) 10min. Picture A:Target. Picture B: DAPI. Picture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



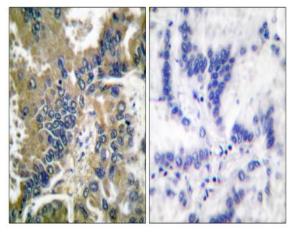
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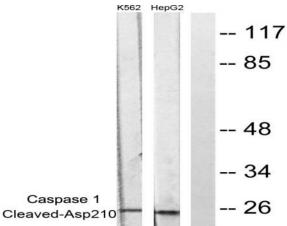
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Western Blot analysis of NIH-3T3 cells using Cleaved-Caspase-1 (D210) Polyclonal Antibody diluted at 1:1000



Immunohistochemistry analysis of paraffin-embedded human lung carcinoma tissue, using IL-1 beta (Cleaved-Asp210) Antibody. The picture on the right is blocked with the synthesized peptide.



Western blot analysis of lysates from NIH/3T3 cells, treated with Etoposide 25uM 60', using IL-1 beta (Cleaved-Asp210) Antibody. The lane on the right is blocked with the synthesized peptide.