




Rabbit Anti-Caspase-1 P10 antibody

SL0169R

Product Name:	Caspase-1 P10
Chinese Name:	天冬氨酸-胱氨酸特异性蛋白酶家族抗体
Alias:	caspase-1 isoform alpha p10 subunit; CASP 1; CASP1; Caspase 1 apoptosis related cysteine peptidase; Caspase 1 apoptosis related cysteine protease; Caspase1; ICE; IL 1 beta converting enzyme; IL 1BC; IL1B convertase; IL1BC; IL1BCE; Interleukin 1 beta convertase; Interleukin 1 beta convertase precursor; Interleukin 1 beta converting enzyme. CASP-1; Interleukin-1 beta convertase; IL-1BC; Interleukin-1 beta-converting enzyme; ICE; IL-1 beta-converting enzyme; p45; Caspase-1 subunit p10.
文献引用 	<p>Specific References(4)SL0169R has been referenced in 4 publications.</p> <p>[IF=4.60]Wang, Shaolan, et al. "Xenobiotic receptor PXR regulates innate immunity via activation of NLRP3 inflammasome in vascular endothelial cells." Journal of Biological Chemistry (2014): jbc-M114.WB;Human. PubMed:25202020</p> <p>[IF=2.10]Hu, Hanhua, et al. "Drug-induced apoptosis of Echinococcus granulosus protoscoleces." Parasitology research 109.2 (2011): 453-459.IHC-P;Others. PubMed:21365454</p> <p>[IF=3.32]Yao, Xiao, et al. "Estrogen-provided cardiac protection following burn trauma is mediated through a reduction in mitochondria-derived DAMPs." Am J Physiol Heart Circ Physiol 306.6 (2014): H882-H894.IHC-P; PubMed:24464748</p> <p>[IF=3.23]Daverey, Amita, and Sandeep K. Agrawal. "Curcumin alleviates oxidative stress and mitochondrial dysfunction in astrocytes." Neuroscience 333 (2016): 92-103.WB;Human.</p>

	PubMed:27423629
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat,
Applications:	WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	10/45kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Caspase-1:320-404/404
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	<p>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 of this gene results in five transcript variants encoding distinct isoforms. [provided by RefSeq].</p> <p>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.</p> <p>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 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</p>

caspsases. Interacts with CARD17/INCA and CARD18.

Subcellular Location:

Cytoplasm.

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.

Post-translational modifications:

The two subunits are derived from the precursor sequence by an autocatalytic mechanism.

Similarity:

Belongs to the peptidase C14A family.
Contains 1 CARD domain.

SWISS:

P29466

Gene ID:

834

Database links:

[Entrez Gene: 834](#)Human

[Entrez Gene: 12362](#)Mouse

[Entrez Gene: 25166](#)Rat

[Omin: 147678](#)Human

[SwissProt: P29466](#)Human

[SwissProt: P29452](#)Mouse

[SwissProt: P43527](#)Rat

[Unigene: 2490](#)Human

[Unigene: 1051](#)Mouse

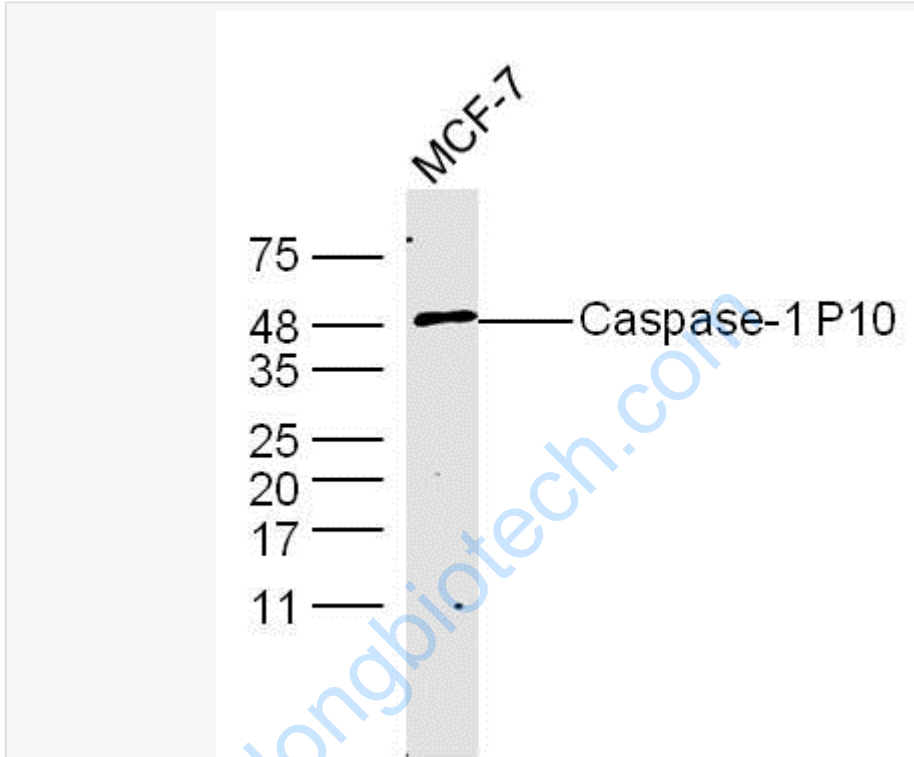
[Unigene: 37508](#)Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Caspase-1是半胱氨酸蛋白中的一种酶, 参与Apoptosis的调控。它主要用于各种良、恶性Tumour的研究。

Picture:



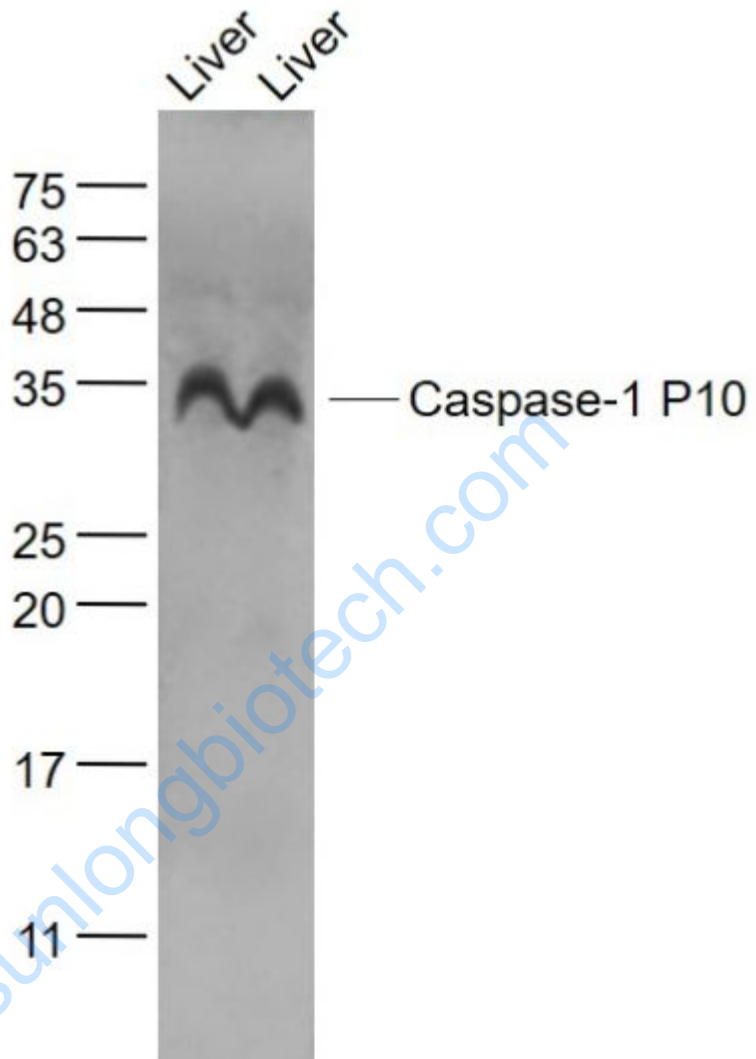
Sample: MCF-7 Cell Lysate at 40 ug

Primary: Anti- Caspase-1 P10 (SL0169R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/10000 dilution

Predicted band size: 10/45 kD

Observed band size: 48 kD



Sample:

Liver (Mouse) Lysate at 40 ug

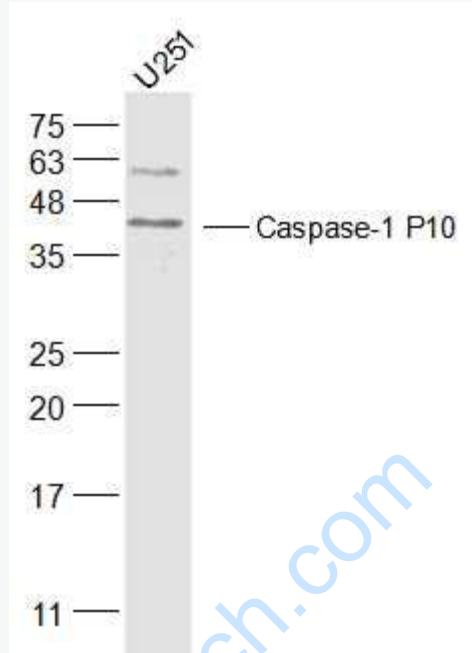
Liver (Mouse) Lysate at 40 ug

Primary: Anti- Caspase-1 P10 (SL0169R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 10/45 kD

Observed band size: 35 kD



Sample:

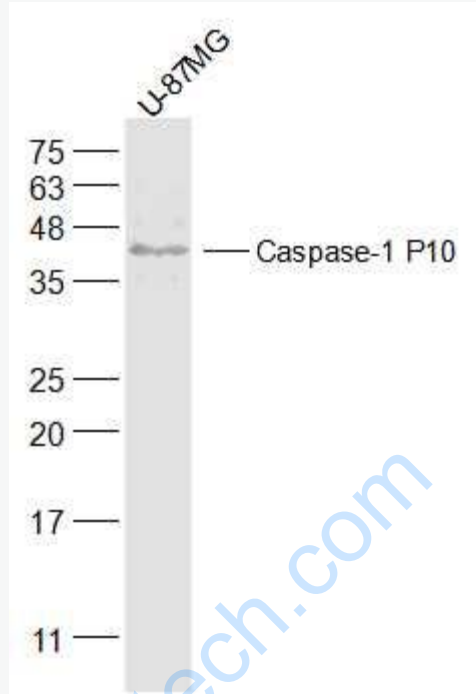
U251(Human) Cell Lysate at 30 ug

Primary: Anti-Caspase-1 P10 (SL0169R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 10/45 kD

Observed band size: 45 kD



Sample:

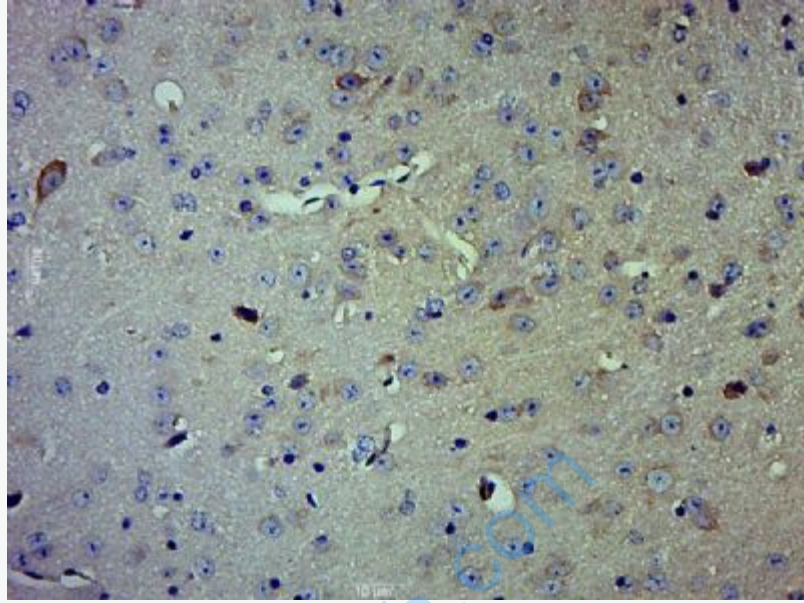
U-87MG(Human) Cell Lysate at 30 ug

Primary: Anti-Caspase-1 P10 (SL0169R) at 1/500 dilution

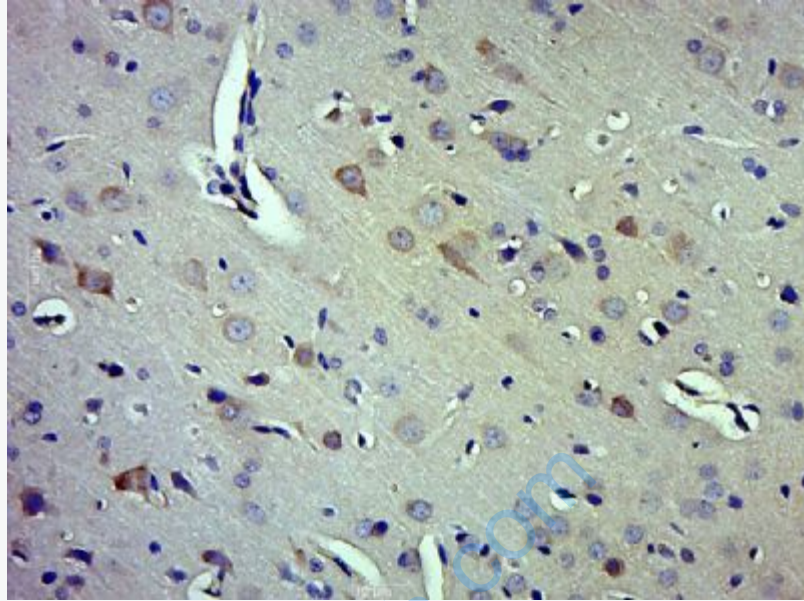
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 10/45 kD

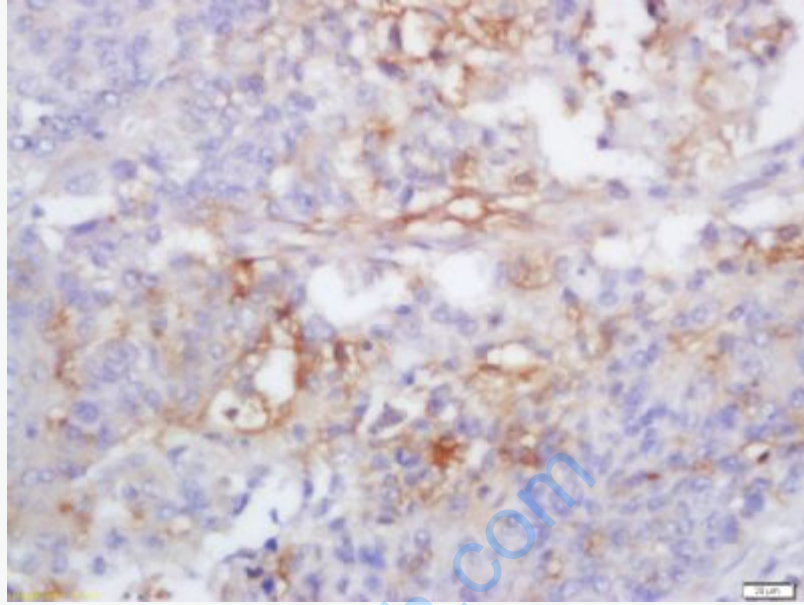
Observed band size: 45 kD



Paraformaldehyde-fixed, paraffin embedded (Mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Caspase-1 P10) Polyclonal Antibody, Unconjugated (SL0169R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



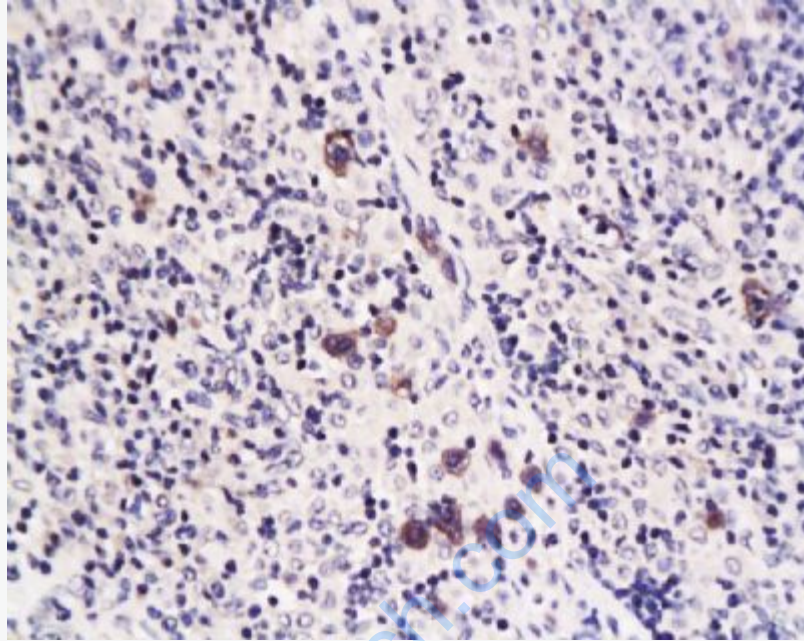
Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Caspase-1 P10) Polyclonal Antibody, Unconjugated (SL0169R) at 1:500 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.



Tissue/cell: human lung carcinoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Caspase-1 Polyclonal Antibody, Unconjugated(SL0169R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Tissue/cell: rat transplant lymphoma; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Caspase-1 Polyclonal Antibody, Unconjugated(SL0169R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining