

Rabbit Anti-Caspase-1 p20 antibody

SL6368R

Product Name:	Caspase-1 p20
Chinese Name:	天冬氨酸-胱氨酸特异性蛋白酶家族抗体
Alias:	caspase-1 isoform alpha p20 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 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 p20.
文献引用	Specific References(1) SL6368R has been referenced in 1 publications.
Pub Med	[IF=3.06]Zhang, Bo, et al. "Cortistatin inhibits NLRP3 inflammasome activation of
	cardiac fibroblasts during sepsis." Journal of Cardiac Failure (2015). WB;Rat. PubMed:25639691
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,
Applications:	ELISA=1:500-1000IHC-P=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	20/46kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Caspase-1 p20:188-290/404
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:	<u>PubMed</u>
	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].

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.

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 caspases. 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.

Product Detail:

SWISS: P29466

Gene ID: 834

Database links:

Entrez Gene: 834Human

Entrez Gene: 12362 Mouse

Entrez Gene: 25166Rat

Omim: 147678Human

SwissProt: P29466Human

SwissProt: P29452Mouse

SwissProt: P43527Rat

Unigene: 2490Human

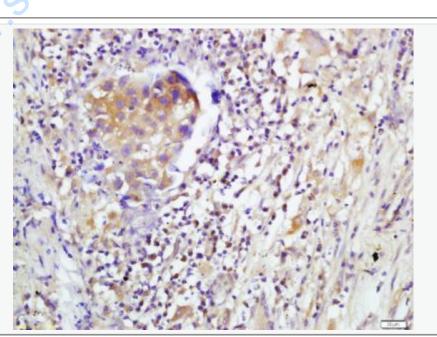
Unigene: 1051 Mouse

Unigene: 37508Rat

Important Note:

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





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

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 p20 Polyclonal Antibody, Unconjugated(SL6368R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

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