

Rabbit Anti-CASP4 antibody

SL0082R

Product Name	CASP4
Chinese Name	半胱氨酸蛋白酶蛋白-4 抗体
Alias	Caspase-4 subunit p20; Caspase-11; CASP-11; Protease ICH-3; Apoptosis related cysteine peptidase; Apoptotic cysteine protease Mih1/TX; CASP 4; CASP-4; CASP4; CASP4_HUMAN; CASP4_MOUSE; Caspase 4 apoptosis related cysteine peptidase; Caspase-4 subunit 2; Caspase4; ICE(rel) II; ICE(rel)-II; ICE(rel)II; ICEREL II; ICERELII; ICH 2; ICH 2 protease; ICH2; Mih1/TX; Mih1/TX; Protease ICH-2; Protease TX; TX; TX protease; EC:3.4.22.64.
Research Area	Cell biology immunology Stem cells Apoptosis
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Human (predicted:Mouse,Rat,Chicken,Rabbit,Zebrafish) Flow-Cyt=2ug/Test
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	20/43kDa
Cellular localization	cytoplasmic Secretory protein
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from mouse Caspase-4 subunit p20: 201-300/373
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

PubMed

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Caspase 4 is a 377 amino acid protein (43 kDa) that belongs to the Ced3/ICE family of cystein proteases. Caspase 4 is an "upstream" caspase with a long prodomain. It undergoes a cleavage upon activation, leading to p20 and p10 subunits which have 67% homology to mature Caspase 1 over the equivalent coding sequences. Caspase 4 is capable of cleaving itself and the p30 Caspase 1 precursor, and of inducing apoptosis in transfected insect or COS cells. In high concentrations, it can also cleave the nuclear DNA enzyme PARP but the biological relevance of this cleavage is unclear. Caspase 4 mRNA is found in most tissues examined with the exception of the brain. Highest expression is found in spleen and lung, with moderate expression in heart and liver. Low expression is observed with skeletal muscle, kidney, and testis.

Function:

Involved in the activation cascade of caspases responsible for apoptosis execution. Cleaves caspase-1.

Subunit:

Heterotetramer that consists of two anti-parallel arranged heterodimers, each one formed by a small and a large subunit.

Product Detail

Tissue Specificity:

Widely expressed, with highest levels in spleen and lung. Moderate expression in heart and liver, low expression in skeletal muscle, kidney and testis. Not found in the brain.

Post-translational modifications:

The two subunits are derived from the precursor sequence by an autocatalytic mechanism or by cleavage by Caspase-8.

Similarity:

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

SWISS:

P49662

Gene ID:

12363

Database links:

[Entrez Gene: 837](#) Human

[Entrez Gene: 12363](#) Mouse

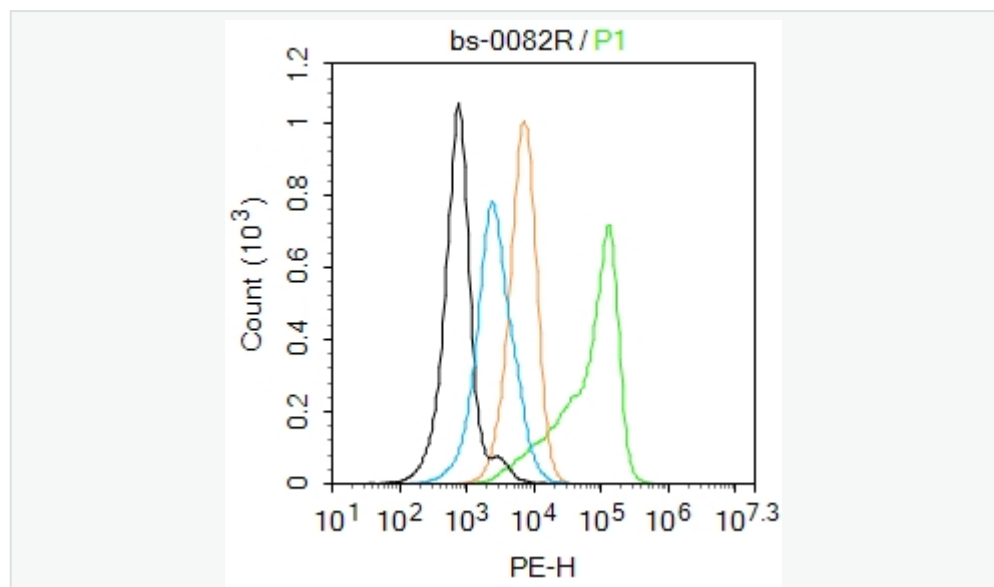
[Omim: 602664](#) Human

[SwissProt: P49662](#) Human

[SwissProt: P70343](#) Mouse

[Unigene: 138378](#) Human

[Unigene: 1569](#) Mouse



Product Picture

Blank control:U937.

Primary Antibody (green line): Rabbit Anti-Caspase 4 p20 antibody (SL0082R)

Dilution: 2 μ g /10⁶ cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 1 μ g /test.

Protocol

The cells were fixed with 4% PFA (10min at room temperature)and then permeabilized with 90% ice-cold methanol for 20 min at room temperature. The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.