

## Anti-Caspase-5 CASP5 Antibody

Catalog Number: A05259-1

### Introduction

CD3epsilon is a 20kD chain, which together with CD3lambda, CD3delta, and CD3zeta, and a T cell receptor (alpha/beta or gamma/delta) form the CD3/T-cell receptor complex. It is a specific marker for T lymphocytes, NK T cells, and some thymocytes. Crosslinking of TCR initiates an intracellular signaling cascade resulting in cellular activation and proliferation. The OKT3 antibody has been reported to have potent immunosuppressive properties in vivo and has been proved effective in the treatment of renal, heart, and liver allograft rejection.

This antibody is routinely tested by flow cytometric analysis. Flow cytometry and other applications were tested during antibody development or are reported in the literature.

### Application Information

Each lot of this antibody has been quality control tested by flow cytometric analysis of human PBMCs. For flow cytometric staining, the recommended use of this antibody is  $\leq 0.5\mu\text{g}$  per  $1 \times 10^6$  cells in  $100\mu\text{l}$  of staining volume followed by a secondary fluorescent conjugated anti-mouse antibody. However, it is strongly suggested that the antibody reactivity be empirically titrated for optimal performance in the application of interest.

### About CASP5

Caspases are a family of cysteine proteases that can be divided into the apoptotic and inflammatory caspase subfamilies. Unlike the apoptotic caspases, members of the inflammatory subfamily are generally not involved in cell death but are associated with the immune response to microbial pathogens. Members of this subfamily include caspase-1, -4, -5, and -12. Activation of these caspases results in the cleavage and activation of proinflammatory cytokines such as IL-1beta and IL-18. Caspase-5 can interact with caspase-1; both are constituents of the NALP1 inflammasome, a complex that can trigger the cleavage of pro-IL-1beta. Expression of caspase-5 can be regulated by lipopolysaccharide (LPS) and IFN-gamma.

### Overview

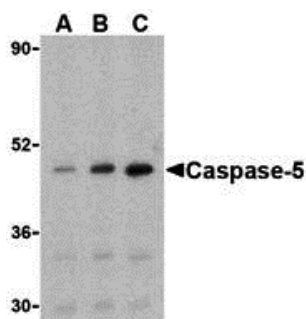
Product Name	Anti-Caspase-5 CASP5 Antibody
Reactive Species	Human, Mouse
Description	Boster Bio Anti-Caspase-5 CASP5 Antibody (Catalog # A05259-1). Tested in ELISA, WB, ICC, IF applications. This antibody reacts with Human, Mouse.
Conjugate	Biotin
Application	ELISA, IF, ICC, WB
Clonality	Polyclonal SK7
Formulation	Caspase-5 Antibody is supplied in PBS containing 0.02% sodium azide.
Storage Instructions	Caspase-5 antibody can be stored at 4°C for three months and -20°C, stable for up to one year. Avoid repeated freeze-thaw cycles. Antibodies should not be exposed to prolonged high temperatures.

Host	Rabbit
Uniprot ID	P51878

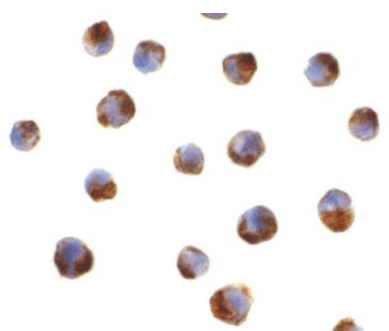
## Technical Details

Immunogen	Caspase-5 antibody was raised against a 14 amino acid synthetic peptide from the center of human Caspase-5. The immunogen is located within amino acids 170 - 220 of Caspase-5.
Predicted Reactive Species	Bovine
Cross Reactivity	Depending on cell lines or tissues used, other cleavage products may be observed.
Isotype	IgG
Form	Liquid
Concentration	1 mg/mL
Purification	Caspase-5 Antibody is affinity chromatography purified via peptide column.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>Casp-5 antibody can be used for the detection of caspase-5 by Western blot at 0.5 - 2 ug/mL.</p> <p>Antibody can also be used for immunocytochemistry starting at 2 ug/mL. For immunofluorescence start at 2 ug/mL.</p> <p>Antibody validated: Western Blot in human samples; Immunocytochemistry in mouse samples and Immunofluorescence in mouse samples. All other applications and species not yet tested. Optimal dilutions for each application should be determined by the researcher.</p>

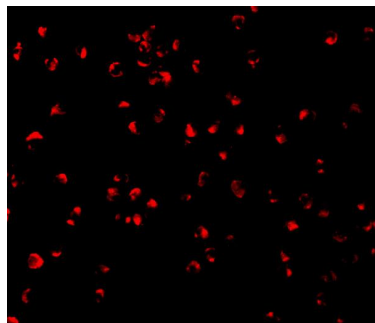
## Anti-Caspase-5 CASP5 Antibody (A05259-1) Images



Western blot analysis of caspase-5 in Ramos cells with caspase-5 antibody at (A) 0.5



Immunocytochemistry of caspase-5 in P815 cells with caspase-5 antibody at 2 ug/mL.



Immunofluorescence of Caspase-5 in P815 cells with Caspase-5 antibody at 2 ug/mL.

## Submit a product review to Biocompare.com

Submit a review of this product to Biocompare.com to receive a \$20 Amazon.com giftcard! Your reviews help your fellow scientists make the right decisions. Thank you for your contribution.



Anti-Caspase-5 CASP5 Antibody