

Anti-C5 Antibody Picoband®

Catalog Number: A00156-1

About C5

Complement component 5 is a protein that in humans is encoded by the C5 gene. This gene encodes a component of the complement system, a part of the innate immune system that plays an important role in inflammation, host homeostasis, and host defense against pathogens. The encoded preproprotein is proteolytically processed to generate multiple protein products, including the C5 alpha chain, C5 beta chain, C5a anaphylatoxin and C5b. The C5 protein is comprised of the alpha and beta chains, which are linked by a disulfide bridge. Cleavage of the alpha chain by a convertase enzyme results in the formation of the C5a anaphylatoxin, which possesses potent spasmogenic and chemotactic activity, and the C5b macromolecular cleavage product, a subunit of the membrane attack complex (MAC). Mice with a homozygous mutation in this gene exhibit impaired bone fracture healing and an enhanced inflammatory response in an allergic lung disease model.

Overview

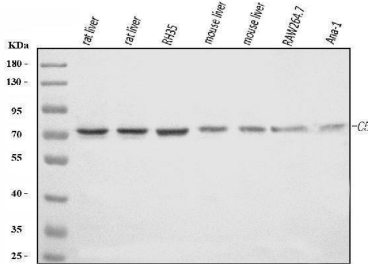
Product Name	Anti-C5 Antibody Picoband®
Reactive Species	Mouse, Rat
Description	Boster Bio Anti-C5 Antibody Picoband® catalog # A00156-1. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	ELISA, Flow Cytometry, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	At -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freezing and thawing.
Host	Rabbit
Uniprot ID	P06684

Technical Details

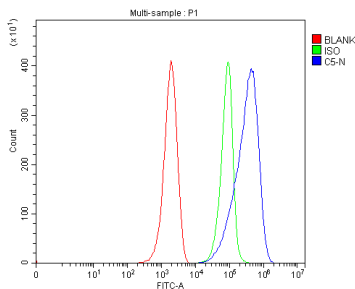
Immunogen	E.coli-derived mouse C5 recombinant protein (Position: Q19-D294).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.25-0.5 ug/ml, Mouse, Rat Flow Cytometry (Fixed), 1-3 ug/1x10 ⁶ cells, Mouse ELISA, 0.1-0.5 ug/ml, -

Anti-C5 Antibody Picoband® (A00156-1) Images



Western blot analysis of C5 using anti-C5 antibody (A00156-1). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: rat liver tissue lysates, Lane 3: rat RH35 whole cell lysates, Lane 4: mouse liver tissue lysates, Lane 5: mouse liver tissue lysates, Lane 6: mouse RAW364.7 whole cell lysates, Lane 7: mouse ANA-1 whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-C5 antigen affinity purified polyclonal antibody (Catalog # A00156-1) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for C5 at approximately 75 kDa. The expected band size for C5 is at 188 kDa.



Flow Cytometry analysis of ANA-1 cells using anti-C5 antibody (A00156-1). Overlay histogram showing ANA-1 cells stained with A00156-1 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-C5 Antibody (A00156-1, 1 ug/1x10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

1 Publications Citing This Product

1. PubMed ID: 10.1016/j.envpol.2016.07.073, Cadmium-induced immune abnormality is a key pathogenic event in human and rat models of preeclampsia

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Anti-C5 Antibody

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