

Anti-CD11b/ITGAM Antibody Picoband™

Catalog Number: PB9140

About ITGAM

Integrin alpha M (ITGAM) is one protein subunit that forms the heterodimeric integrin alpha-M beta-2 (alphaMbeta2) molecule, also known as macrophage-1 antigen (Mac-1) or complement receptor 3 (CR3). It is mapped to 16p11.2. ITGAM has a role in vascular repair after mechanical arterial injury. It is implicated in various adhesive interactions of monocytes, macrophages and granulocytes as well as in mediating the uptake of complement-coated particles. What's more, ITGAM probably recognizes the R-G-D peptide in C3b, and it is also a receptor for fibrinogen, factor X and ICAM1.

Overview

Product Name	Anti-CD11b/ITGAM Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-CD11b/ITGAM Antibody Picoband™ catalog # PB9140. Tested in Flow Cytometry, IHC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IHC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4 mg Trehalose, 0.9 mg NaCl and 0.2 mg Na ₂ HPO ₄ .
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P11215

Technical Details

Immunogen	E.coli-derived human CD11b recombinant protein (Position: F17-T382). Human CD11b shares 79% and 61% amino acid (aa) sequences identity with mouse and rat CD11b, respectively.
Predicted Reactive Species	Bovine, Horse, Monkey, Rabbit
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P).
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	<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>Western blot, 0.1-0.5ug/ml, Human</p> <p>Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml, Human, Mouse, Rat, By Heat</p> <p>Flow Cytometry, 1-3ug/1x10⁶ cells, Human</p>

Anti-CD11b/ITGAM Antibody Picoband™ (PB9140) Images

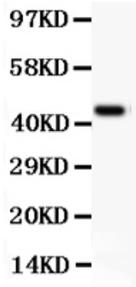


Figure 1. Western blot analysis of CD11b using anti-CD11b antibody (PB9140). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. Lane 1: recombinant human CD11B protein 0.5 ng. After electrophoresis, proteins were transferred to a nitrocellulose 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-CD11b antigen affinity purified polyclonal antibody (Catalog # PB9140) 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 CD11b at approximately 45 kDa. The expected band size for CD11b is at 45 kDa.

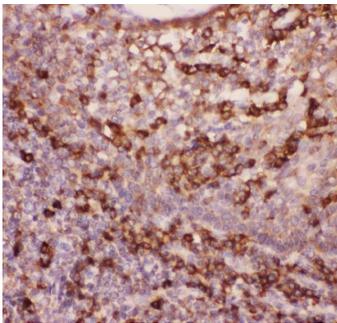


Figure 2. IHC analysis of CD11b using anti-CD11b antibody (PB9140). CD11b was detected in a paraffin-embedded section of human tonsil tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-CD11b Antibody (PB9140) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

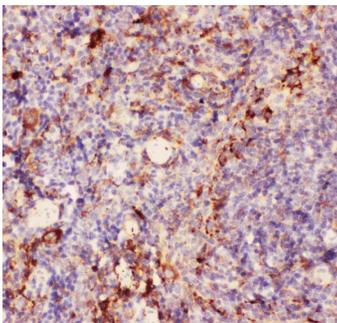
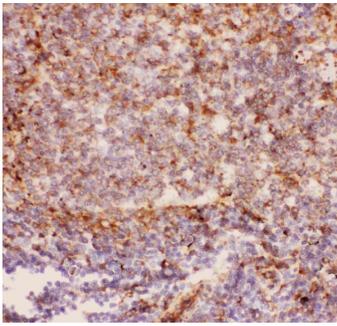


Figure 3. IHC analysis of CD11b using anti-CD11b antibody (PB9140). CD11b was detected in a paraffin-embedded section of mouse spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-CD11b Antibody (PB9140) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

Figure 4. IHC analysis of CD11b using anti-CD11b antibody (PB9140). CD11b was detected in a paraffin-embedded section of rat spleen tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml



rabbit anti-CD11b Antibody (PB9140) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

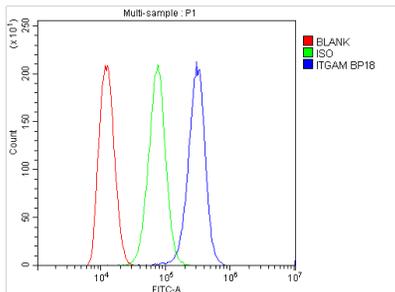


Figure 5. Flow Cytometry analysis of THP-1 cells using anti-CD11b antibody (PB9140).

Overlay histogram showing THP-1 cells stained with PB9140 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD11b Antibody (PB9140, 1 μ g/1 \times 10⁶ cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 μ g/1 \times 10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1 \times 10⁶) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

11 Publications Citing This Product

1. PubMed ID: PMID:25691929, Expressions of CD11a, CD11b, and CD11c integrin proteins in rats with myocardial hypertrophy
2. PubMed ID: 10.1159/000358235, The Neurovascular Protective Effects of Huperzine A on D-Galactose-Induced Inflammatory Damage in the Rat Hippocampus
3. PubMed ID: 10.1016/j.cellbi.2009.01.008, Rat bone marrow derived mesenchymal progenitor cells support mouse ES cell growth and germ-like cell differentiation

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