

## Anti-SIGLEC12 Antibody Picoband®

Catalog Number: A10550-1

### About SIGLEC12

Sialic acid-binding Ig-like lectin 12, or Siglec-XII, is a protein that in humans, is encoded by the SIGLEC12 gene. Sialic acid-binding immunoglobulin-like lectins (SIGLECs) are a family of cell surface proteins belonging to the immunoglobulin superfamily. They mediate protein-carbohydrate interactions by selectively binding to different sialic acid moieties present on glycolipids and glycoproteins. This gene encodes a member of the SIGLEC3-like subfamily of SIGLECs. Members of this subfamily are characterized by an extracellular V-set immunoglobulin-like domain followed by two C2-set immunoglobulin-like domains, and the cytoplasmic tyrosine-based motifs ITIM and SLAM-like. The encoded protein, upon tyrosine phosphorylation, has been shown to recruit the Src homology 2 domain-containing protein-tyrosine phosphatases SHP1 and SHP2. It has been suggested that the protein is involved in the negative regulation of macrophage signaling by functioning as an inhibitory receptor. This gene is located in a cluster with other SIGLEC3-like genes on 19q13.4. Alternative splicing results in multiple transcript variants.

### Overview

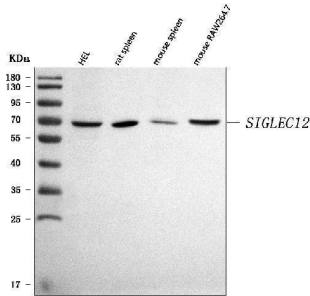
Product Name	Anti-SIGLEC12 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-SIGLEC12 Antibody Picoband® catalog # A10550-1. Tested in ELISA, Flow Cytometry, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody 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 <sub>2</sub> HPO <sub>4</sub> .
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	Q96PQ1

### Technical Details

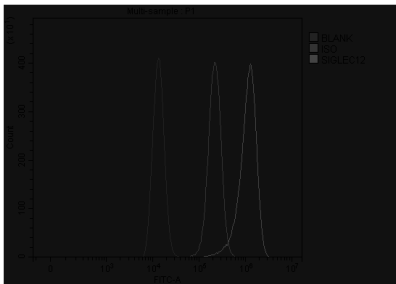
Immunogen	E.coli-derived human SIGLEC12 recombinant protein (Position: S31-H287).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.
Cross Reactivity	No cross-reactivity with other proteins.
Isotype	Rabbit IgG

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

## Anti-SIGLEC12 Antibody Picoband® (A10550-1) Images



Western blot analysis of SIGLEC12 using anti-SIGLEC12 antibody (A10550-1). 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: human HEL whole cell lysates, Lane 2: rat spleen tissue lysates, Lane 3: mouse spleen tissue lysates, Lane 4: mouse RAW264.7 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-SIGLEC12 antigen affinity purified polyclonal antibody (Catalog # A10550-1) 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 SIGLEC12 at approximately 70 kDa. The expected band size for SIGLEC12 is at 65 kDa.



Flow Cytometry analysis of HEL cells using anti-SIGLEC12 antibody (A10550-1). Overlay histogram showing HEL cells stained with A10550-1 (Blue line). The cells were fixed with 4% paraformaldehyde and blocked with 10% normal goat serum. And then incubated with rabbit anti-SIGLEC12 Antibody (A10550-1, 1 ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10 ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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### Anti-SIGLEC12 Antibody

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