

Anti-CD89/FCAR Antibody Picoband™

Catalog Number: A07546-1

About FCAR

FCAR, Receptor for Fc fragment of IgA, is also known as CD89. Human Fc-alpha receptor(FCAR) is present on a number of cell types, including neutrophils, monocytes, macrophages, and eosinophils. FCAR interacts with aggregated IgAs, such as IgA coated on the surface of an invading microorganism, and mediates several immunologic defense processes such as phagocytosis, antibody-dependent cell-mediated cytotoxicity, and stimulation of the release of inflammatory mediators. FCAR is a glycoprotein of 50 to 100 kD, with diversity on different cell types. FCAR is mapped to 19q13.4. Human COS cells transfected with FCAR cDNA bind to IgA, but not IgG.

Overview

Product Name	Anti-CD89/FCAR Antibody Picoband™
Reactive Species	Human
Description	Boster Bio Anti-CD89/FCAR Antibody Picoband™ catalog # A07546-1. Tested in ELISA, Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	ELISA, Flow Cytometry, IF, ICC, 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	P24071

Technical Details

Immunogen	E.coli-derived human CD89/FCAR recombinant protein (Position: Q22-K287).
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 ICC.
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

Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.

If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.

Some PubMed article(s) citing the expression level of this target are as follows:

Boster Bio's internal QC testing used:

Western blot, 0.1-0.25 ug/ml, Human

Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human

Flow Cytometry, 1-3 ug/ 1×10^6 cells, Human

Direct ELISA, 0.1-0.5 ug/ml, Human

Anti-CD89/FCAR Antibody Picoband™ (A07546-1) Images

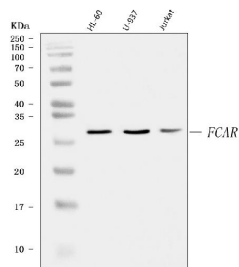


Figure 1. Western blot analysis of CD89/FCAR using anti-CD89/FCAR antibody (A07546-1).

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 HL-60 whole cell lysates,

Lane 2: human U-937 whole cell lysates,

Lane 3: human Jurkat 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-CD89/FCAR antigen affinity purified polyclonal antibody (Catalog # A07546-1) at 0.25 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 CD89/FCAR at approximately 32 kDa. The expected band size for CD89/FCAR is at 32 kDa.

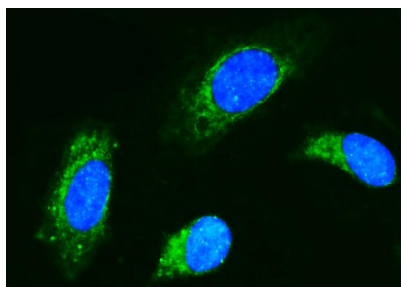


Figure 2. IF analysis of CD89/FCAR using anti-CD89/FCAR antibody (A07546-1).

CD89/FCAR was detected in an immunocytochemical section of HeLa cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-CD89/FCAR Antibody (A07546-1) overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.

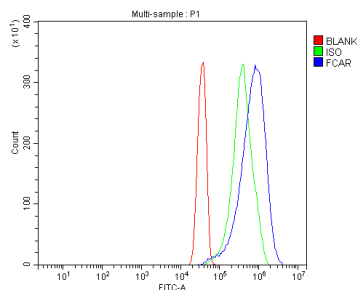


Figure 3. Flow Cytometry analysis of HeLa cells using anti-CD89/FCAR antibody (A07546-1).

Overlay histogram showing HeLa cells stained with A07546-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-CD89/FCAR Antibody (A07546-1, 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 (Red line) was also used as a control.

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