

## Anti-LRRC75A Antibody Picoband®

Catalog Number: A18461-1

### About LRRC75A

Long noncoding RNAs (lncRNAs) play multiple key roles during inflammatory processes. A novel lncRNA identified by the high-throughput sequencing analysis was found significantly down-regulated in Escherichia coli-introduced cell model of bovine mastitis. Given that this lncRNA consists of the antisense of leucine-rich repeat-containing protein 75A (LRRC75A), it was named LRRC75A antisense lncRNA1 (LRRC75A-AS1). The expression of LRRC75A-AS1 was down-regulated in bovine mammary epithelial cells and mammary tissues under inflammatory condition. Knockout (KO) of LRRC75A-AS1 by CRISPR-Cas9 system in bovine mammary alveolar cell-T (MAC-T) cell line could enhance expressions of tight junction (TJ) proteins Claudin-1, Occludin and ZO-1, reduce cell monolayer permeability, and inhibit Staphylococcus aureus adhesion and invasion. Meanwhile, it also down-regulated expressions of inflammatory factors and attenuated activation of NF-kappaB pathway. Similarly, knockdown of LRRC75A caused the changes as LRRC75A-AS1 KO did, while overexpression of LRRC75A enabled the opposite effects. TJ of epithelioid cells barriers the pathogenic microorganisms outside during inflammation, in which LRRC75A-AS1 can regulate the expression of TJ proteins through LRRC75A, affecting the development of inflammation.

### Overview

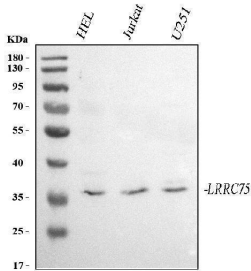
Product Name	Anti-LRRC75A Antibody Picoband®
Reactive Species	Human
Description	Boster Bio Anti-LRRC75A Antibody Picoband® catalog # A18461-1. Tested in ELISA, WB, Flow Cytometry applications. This antibody reacts with Human. The brand Picoband indicates this is a premium antibody that guarantees superior 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	Q8NAA5

### Technical Details

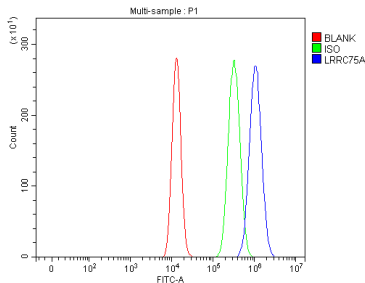
Immunogen	E.coli-derived human LRRC75A recombinant protein (Position: H52-Q292).
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western blot.

Cross Reactivity	No cross reactivity with other proteins.
Isotype	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 µg/ml, Human Flow Cytometry (Fixed), 1-3 µg/1x10 <sup>6</sup> cells, Human ELISA, 0.1-0.5 µg/ml, -

## Anti-LRRC75A Antibody Picoband® (A18461-1) Images



Western blot analysis of LRRC75A using anti-LRRC75A antibody (A18461-1). 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: human Jurkat whole cell lysates, Lane 3: human U251 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-LRRC75A antigen affinity purified polyclonal antibody (Catalog # A18461-1) 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 LRRC75A at approximately 36 kDa. The expected band size for LRRC75A is at 38 kDa.



Flow Cytometry analysis of HEL cells using anti-LRRC75A antibody (A18461-1). Overlay histogram showing HEL cells stained with A18461-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-LRRC75A Antibody (A18461-1, 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 (Red line) was also used as a control.

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Anti-LRRC75A Antibody

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