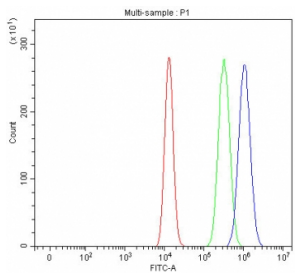
LRRC75A Antibody / FAM211A (RQ8570)

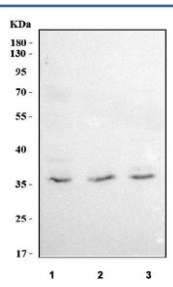
Catalog No.	Formulation	Size
RQ8570	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Availability	1-3 days
Species Reactivity	Human
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q8NAA5
Applications	Western Blot : 0.5-1ug/ml Flow Cytometry : 1-3ug/million cells ELISA : 0.1-0.5ug/ml
Limitations	This LRRC75A antibody is available for research use only.



Flow cytometry testing of fixed and permeabilized human HEL cells with LRRC75A antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= LRRC75A antibody.



Western blot testing of human 1) HEL, 2) Jurkat and 3) U-251 cell lysate with LRRC75A antibody. Predicted molecular weight ~38 kDa.

Description

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-?B 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.

Application Notes

Optimal dilution of the LRRC75A antibody should be determined by the researcher.

Immunogen

An E.coli-derived human recombinant protein (amino acids H52-Q292) was used as the immunogen for the LRRC75A antibody.

Storage

After reconstitution, the LRRC75A antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.