

## Anti-RASGRP1 Antibody Picoband®

Catalog Number: A03004-1

### About RASGRP1

RAS guanyl-releasing protein 1 is a protein that in humans is encoded by the RASGRP1 gene. This gene is a member of a family of genes characterized by the presence of a Ras superfamily guanine nucleotide exchange factor (GEF) domain. It functions as a diacylglycerol (DAG)-regulated nucleotide exchange factor specifically activating Ras through the exchange of bound GDP for GTP. It activates the Erk/MAP kinase cascade and regulates T-cells and B-cells development, homeostasis and differentiation. Alternatively spliced transcript variants encoding different isoforms have been identified. Altered expression of the different isoforms of this protein may be a cause of susceptibility to systemic lupus erythematosus (SLE).

### Overview

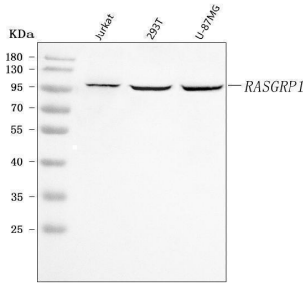
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|----------------------|---|
| Product Name         | Anti-RASGRP1 Antibody Picoband®   |
| Reactive Species     | Human   |
| Description          | Boster Bio Anti-RASGRP1 Antibody Picoband® catalog # A03004-1. Tested in ELISA, Flow Cytometry, WB 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           | O95267  |

### Technical Details

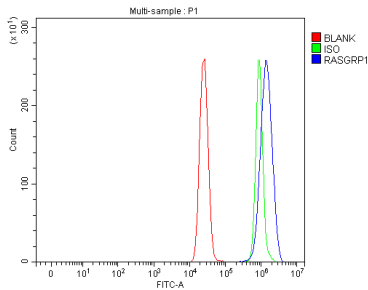
|                               |   |
|-------------------------------|---|
| Immunogen                     | E.coli-derived human RASGRP1 recombinant protein (Position: R8-Q678).                           |
| Recommended Detection Systems | Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit 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<br>Flow Cytometry (Fixed), 1-3 ug/1x10 <sup>6</sup> cells, Human<br>ELISA, 0.1-0.5 ug/ml, - |

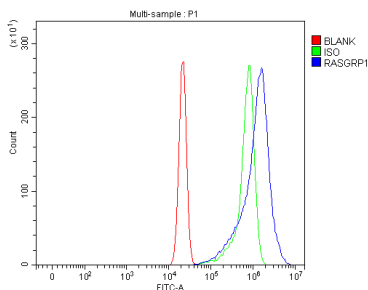
## Anti-RASGRP1 Antibody Picoband® (A03004-1) Images



Western blot analysis of RASGRP1 using anti-RASGRP1 antibody (A03004-1). 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 Jurkat whole cell lysates, Lane 2: human 293T whole cell lysates, Lane 3: human U-87MG 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-RASGRP1 antigen affinity purified polyclonal antibody (Catalog # A03004-1) 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 RASGRP1 at approximately 100 kDa. The expected band size for RASGRP1 is at 90 kDa.



Flow Cytometry analysis of MCF-7 cells using anti-RASGRP1 antibody (A03004-1). Overlay histogram showing MCF-7 cells stained with A03004-1 (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-RASGRP1 Antibody (A03004-1, 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.



Flow Cytometry analysis of U2OS cells using anti-RASGRP1 antibody (A03004-1). Overlay histogram showing U2OS cells stained with A03004-1 (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-RASGRP1 Antibody (A03004-1, 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-RASGRP1 Antibody

For Research Use Only. Not for use in diagnostic procedures.