BOSTER
antibody and ELISA experts

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Anti-RALB Antibody Picoband™

Catalog Number: PB9795

About RALB

Ras-related protein Ral-B (RalB) is a protein that in humans is encoded by the RALB gene on chromosome 2. This protein is one of two isoforms of the Ral protein, the other being RalA, and part of the Ras GTPase family. As a Ras GTPase, RalB functions as a molecular switch that becomes active when bound to GTP and inactive when bound to GDP. RalB can be activated by RalGEFs and, in turn, activate effectors in signal transduction pathways leading to biological outcomes. Additionally, Ral proteins have been associated with the progression of several cancers, including bladder cancer and prostate cancer. While the above functions appear to be shared between the two Ral isoforms, their differential subcellular localizations result in their differing involvement in certain biological processes. In particular, RalB is more involved in apoptosis and cell motility. Moreover, RalB specifically interacts with Exo84 to assemble the beclin-1–VPS34 autophagy initiation complex, and with Sec5 to activate the innate immune response via the Tank-binding kinase 1 (TBK1).

Overview

Product Name	Anti-RALB Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-RALB Antibody Picoband™ catalog # PB9795. Tested in Flow Cytometry, IF, ICC, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage Instructions	Store 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 freeze-thaw cycles.
Host	Rabbit
Uniprot ID	P11234

Technical Details

Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human RALB, different from the related mouse sequence by three amino acids, and from the related rat sequence by four amino acids.
Predicted Reactive Species	Bovine, Monkey
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.

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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, 0.1-0.5ug/ml, Human, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5ug/ml, Human Flow Cytometry, 1-3ug/1x10^6 cells, Human

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Anti-RALB Antibody Picoband™ (PB9795) Images

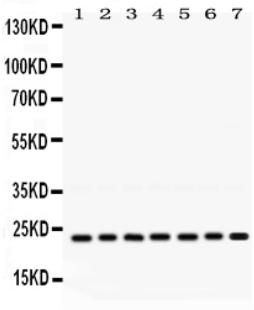

Figure 1. Western blot analysis of RALB using anti-RALB antibody (PB9795).
Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours.
Lane 1: Rat Brain Tissue Lysate at 50ug,
Lane 2: Rat Thymus Tissue Lysate at 50ug,
Lane 3: Rat Lung Tissue Lysate at 50ug,
Lane 4: Mouse Spleen Tissue Lysate at 50ug,
Lane 5: Mouse Liver Tissue Lysate at 50ug,
Lane 6: HELA Whole Cell Lysate at 40ug,
Lane 7: 22RV1 Whole Cell Lysate at 40ug.
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-RALB antigen affinity purified polyclonal antibody (Catalog # PB9795) 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 RALB at approximately 23 kDa. The expected band size for RALB is at 23 kDa.

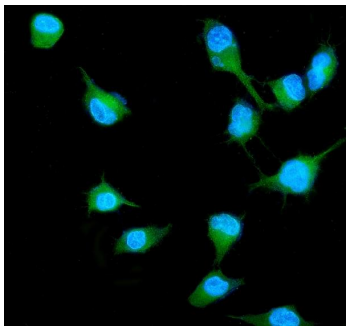

Figure 2. IF analysis of RALB using anti-RALB antibody (PB9795).
RALB was detected in immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5ug/mL rabbit anti-RALB Antibody (PB9795) 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.

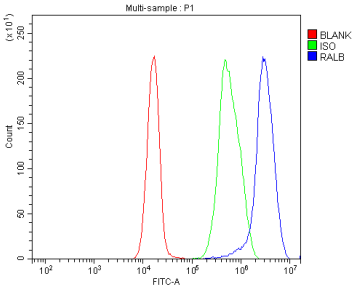

Figure 3. Flow Cytometry analysis of Jurkat cells using anti-RALB antibody (PB9795).
Overlay histogram showing Jurkat cells stained with PB9795 (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-RALB Antibody (PB9795, 1ug/1x10^6 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10^6 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10^6) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

Submit a product review to Biocompare.com

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