

Anti-ARFGAP1 Antibody Picoband™

Catalog Number: A04959

About ARFGAP1

ADP-ribosylation factor GTPase-activating protein 1 is an enzyme that in humans is encoded by the ARFGAP1 gene. And this gene is mapped to 20q13.33. The protein encoded by this gene is a GTPase-activating protein, which associates with the Golgi apparatus and which interacts with ADP-ribosylation factor 1. The encoded protein promotes hydrolysis of ADP-ribosylation factor 1-bound GTP and is required for the dissociation of coat proteins from Golgi-derived membranes and vesicles. Dissociation of the coat proteins is required for the fusion of these vesicles with target compartments. The activity of this protein is stimulated by phosphoinositides and inhibited by phosphatidylcholine. Alternative splicing results in multiple transcript variants.

Overview

Product Name	Anti-ARFGAP1 Antibody Picoband™
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ARFGAP1 Antibody Picoband™ catalog # A04959. Tested in Flow Cytometry, ICC, IHC, IF, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	Flow Cytometry, IF, IHC, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
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	Q8N6T3

Technical Details

Immunogen	E. coli-derived human ARFGAP1 recombinant protein (Position: M1-Y183). Human ARFGAP1 shares 89.1% and 88.5% amino acid (aa) sequence identity with mouse and rat ARFGAP1, respectively.
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 IHC(P) and 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, 0.1-0.5ug/ml, Human, Mouse, Rat Immunohistochemistry(Paraffin-embedded Section), 2-5 ug/ml, Mouse, Rat Immunocytochemistry/Immunofluorescence, 5 ug/ml, Human Flow Cytometry, 1-3 ug/1x10⁶ cells, Human

Anti-ARFGAP1 Antibody Picoband™ (A04959) Images

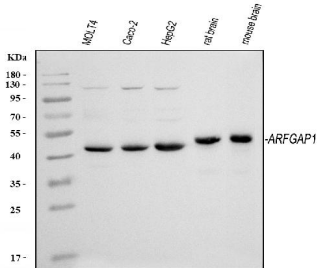


Figure 1. Western blot analysis of ARFGAP1 using anti-ARFGAP1 antibody (A04959).

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 MOLT-4 whole cell lysates,

Lane 2: human Caco-2 whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

Lane 4: rat brain tissue lysates,

Lane 5: mouse brain tissue 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-ARFGAP1 antigen affinity purified polyclonal antibody (Catalog # A04959) 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 ARFGAP1 at approximately 45 kDa. The expected band size for ARFGAP1 is at 45 kDa.

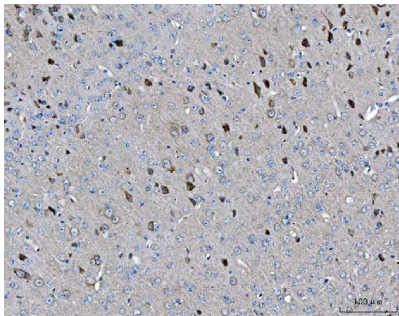


Figure 2. IHC analysis of ARFGAP1 using anti-ARFGAP1 antibody (A04959).

ARFGAP1 was detected in a paraffin-embedded section of mouse brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-ARFGAP1 Antibody (A04959) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

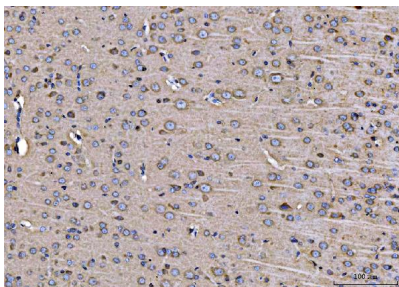


Figure 3. IHC analysis of ARFGAP1 using anti-ARFGAP1 antibody (A04959).

ARFGAP1 was detected in a paraffin-embedded section of rat brain tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2 ug/ml rabbit anti-ARFGAP1 Antibody (A04959) overnight at 4°C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB as the chromogen.

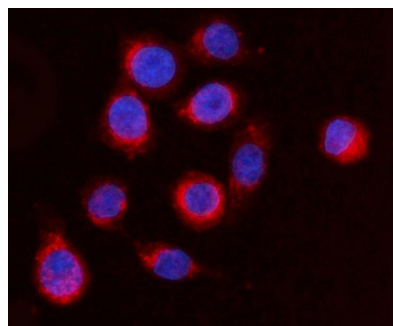


Figure 4. IF analysis of ARFGAP1 using anti-ARFGAP1 antibody (A04959). ARFGAP1 was detected in an immunocytochemical section of CACO-2 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 5 ug/mL rabbit anti-ARFGAP1 Antibody (A04959) overnight at 4°C. DyLight594 Conjugated Goat Anti-Rabbit IgG (BA1142) was used as secondary antibody at 1:500 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.

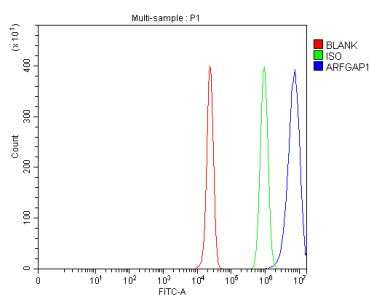


Figure 5. Flow Cytometry analysis of HepG2 cells using anti-ARFGAP1 antibody (A04959). Overlay histogram showing HepG2 cells stained with A04959 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-ARFGAP1 Antibody (A04959, 1 ug/1x10⁶ cells) for 30 min at 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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