

## Anti-IQGAP2 Antibody Picoband™

Catalog Number: A04787-1

### About IQGAP2

Ras GTPase-activating-like protein IQGAP2 is an enzyme that in humans is encoded by the IQGAP2 gene. This gene encodes a member of the IQGAP family. The encoded protein contains three IQ domains, one calponin homology domain, one Ras-GAP domain and one WW domain. This protein interacts with components of the cytoskeleton, with cell adhesion molecules, and with several signaling molecules to regulate cell morphology and motility. It also acts as a tumor suppressor and has been found to play a role in regulating innate antiviral responses. Alternative splicing results in multiple transcript variants.

### Overview

|                      |                                                                                                                                                                                                       |
|----------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name         | Anti-IQGAP2 Antibody Picoband™                                                                                                                                                                        |
| Reactive Species     | Human, Mouse                                                                                                                                                                                          |
| Description          | Boster Bio Anti-IQGAP2 Antibody Picoband™ catalog # A04787-1. Tested in ELISA, Flow Cytometry, IF, IHC, ICC, WB applications. This antibody reacts with Human, Mouse.                                 |
| Application          | ELISA, Flow Cytometry, IF, IHC, ICC, WB                                                                                                                                                               |
| Clonality            | Polyclonal                                                                                                                                                                                            |
| Formulation          | Each vial contains 4mg Trehalose, 0.9mg NaCl, 0.2mg Na <sub>2</sub> HPO <sub>4</sub> , 0.05mg NaN <sub>3</sub> .                                                                                      |
| 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           | Q13576                                                                                                                                                                                                |

### Technical Details

|                               |                                                                                                                                                                                          |
|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Immunogen                     | E. coli-derived human IQGAP2 recombinant protein (Position: A1329-Q1544).                                                                                                                |
| 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

Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml

Immunocytochemistry/Immunofluorescence, 2ug/ml

Flow Cytometry, 1-3ug/1x10<sup>6</sup> cells

Direct ELISA, 0.1-0.5ug/ml

## Anti-IQGAP2 Antibody Picoband™ (A04787-1) Images

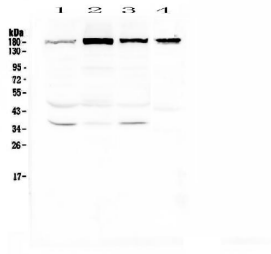


Figure 1. Western blot analysis of IQGAP2 using anti-IQGAP2 antibody (A04787-1).

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 50ug of sample under reducing conditions.

Lane 1: human Hela cell lysates,

Lane 2: human placenta tissue lysates,

Lane 3: human HepG2 cell lysates,

Lane 4: mouse stomach tissue lysates.

After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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-IQGAP2 antigen affinity purified polyclonal antibody (Catalog # A04787-1) 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 1:10000 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 IQGAP2 at approximately 181KD. The expected band size for IQGAP2 is at 181KD.

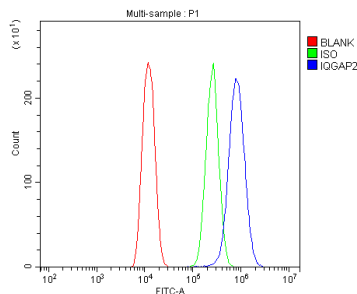


Figure 2. Flow Cytometry analysis of U2OS cells using anti-IQGAP2 antibody (A04787-1).

Overlay histogram showing U2OS cells stained with A04787-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-IQGAP2 Antibody (A04787-1, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

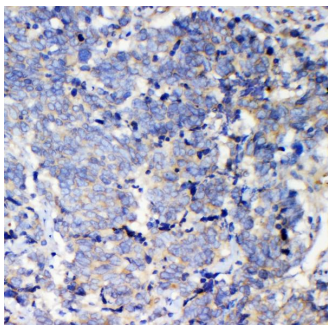
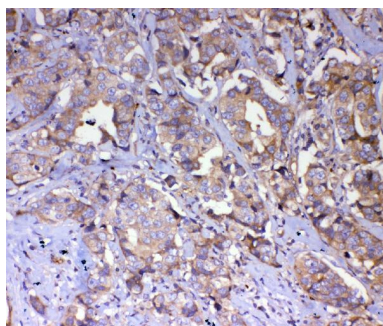


Figure 3. IHC analysis of IQGAP2 using anti-IQGAP2 antibody (A04787-1).

IQGAP2 was detected in paraffin-embedded section of human lung cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-IQGAP2 Antibody (A04787-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

Figure 4. IHC analysis of IQGAP2 using anti-IQGAP2 antibody (A04787-1).



IQGAP2 was detected in paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-IQGAP2 Antibody (A04787-1) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

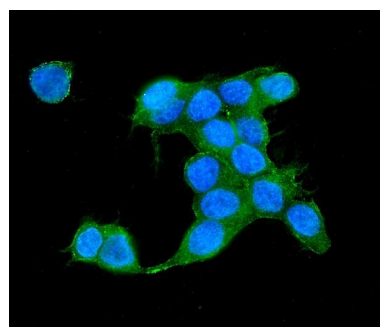


Figure 5. IF analysis of IQGAP2 using anti-IQGAP2 antibody (A04787-1).

IQGAP2 was detected in immunocytochemical section of MCF7 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 2ug/mL rabbit anti-IQGAP2 Antibody (A04787-1) 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.

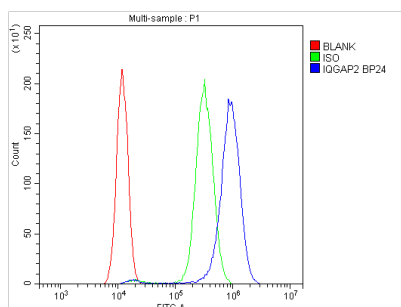


Figure 6. Flow Cytometry analysis of SiHa cells using anti-IQGAP2 antibody (A04787-1).

Overlay histogram showing SiHa cells stained with A04787-1 (Blue line). The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-IQGAP2 Antibody (A04787-1, 1ug/1x10<sup>6</sup> cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127, 5-10ug/1x10<sup>6</sup> cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x10<sup>6</sup>) used under the same conditions. Unlabelled sample (Red line) was also used as a control.

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