

## Rabbit GEF-H1/ARHGEF2 Polyclonal Antibody | anti-GEF-H1/ARHGEF2 antibody

Anti-GEF-H1/ARHGEF2 Antibody Picoband

| CATALOG # | HOST   | REACTIVITY        | APPLICATIONS                                                                |
|-----------|--------|-------------------|-----------------------------------------------------------------------------|
| AAA127130 | Rabbit | Human, Mouse, Rat | ELISA, Flow Cytometry, Functional Assay, Immunohistochemistry, Western Blot |

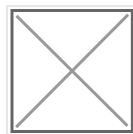
### PRODUCT SYNONYMS

GEF-H1/ARHGEF2; Polyclonal Antibody; Anti-GEF-H1/ARHGEF2 Antibody Picoband; Rho guanine nucleotide exchange factor 2; Rho/Rac guanine nucleotide exchange factor 2; ARHGEF2; KIAA0651; LFP40; Guanine nucleotide exchange factor H1; GEF-H1; Microtubule-regulated Rho-GEF; Proliferating cell nucleolar antigen p40; anti-GEF-H1/ARHGEF2 antibody

### PRODUCT SPECIFICATIONS

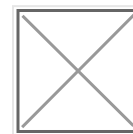
|                                                          |                                                                                                                                                                                                                       |
|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Host                                                     | Rabbit                                                                                                                                                                                                                |
| Reactivity                                               | Human, Mouse, Rat                                                                                                                                                                                                     |
| Clonality                                                | Polyclonal                                                                                                                                                                                                            |
| Isotype                                                  | Rabbit IgG                                                                                                                                                                                                            |
| Purity/Purification                                      | Immunogen affinity purified.                                                                                                                                                                                          |
| Form/Format                                              | Lyophilized. Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na <sub>2</sub> HPO <sub>4</sub> .                                                                                                                |
| Applicable Applications for anti-GEF-H1/ARHGEF2 antibody | ELISA, FCM/FACS (Flow Cytometry), IHC (Immunohistochemistry), WB (Western Blot)                                                                                                                                       |
| Immunogen                                                | E coli-derived human GEF-H1/ARHGEF2 recombinant protein (Position: Q94-E923).                                                                                                                                         |
| Reconstitution                                           | Adding 0.2 ml of distilled water will yield a concentration of 500ug/ml.                                                                                                                                              |
| Cross Reactivity                                         | No cross-reactivity with other proteins                                                                                                                                                                               |
| Preparation and Storage                                  | At -20 degree C for one year from date of receipt. After reconstitution, at 4 degree C for one month. It can also be aliquotted and stored frozen at -20 degree C for six months.Avoid repeated freezing and thawing. |

### IMAGES



#### FCM/FACS (Flow Cytometry)

Figure 5. Flow Cytometry analysis of PC-3 cells using anti-GEF-H1/ARHGEF2 antibody (AAA127130). Overlay histogram showing PC-3 cells stained with AAA127130 (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-GEF-H1/ARHGEF2 Antibody (AAA127130, 1ug/1x10<sup>6</sup> cells) for 30 min at 20 degree C. DyLight488 conjugated goat anti-rabbit IgG was used as secondary antibody for 30 minutes at 20 degree C. Isotype control antibody (Green line) was rabbit IgG (1ug/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.



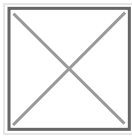
#### IHC (Immunohistochemistry)

Figure 4. IHC analysis of GEF-H1/ARHGEF2 using anti-GEF-H1/ARHGEF2 antibody (AAA127130). GEF-H1/ARHGEF2 was detected in a paraffin-embedded section of human ovary cancer 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 2ug/ml rabbit anti-GEF-H1/ARHGEF2 Antibody (AAA127130) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



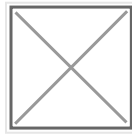
**IHC (Immunohistochemisry)**

Figure 3. IHC analysis of GEF-H1/ARHGEF2 using anti-GEF-H1/ARHGEF2 antibody (AAA127130).GEF-H1/ARHGEF2 was detected in a paraffin-embedded section of human ovarian cancer 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 2ug/ml rabbit anti-GEF-H1/ARHGEF2 Antibody (AAA127130) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



**IHC (Immunohiostchemistry)**

Figure 2. IHC analysis of GEF-H1/ARHGEF2 using anti-GEF-H1/ARHGEF2 antibody (AAA127130).GEF-H1/ARHGEF2 was detected in a paraffin-embedded section of human colon cancer 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 2ug/ml rabbit anti-GEF-H1/ARHGEF2 Antibody (AAA127130) overnight at 4 degree C. Peroxidase Conjugated Goat Anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37 degree C. The tissue section was developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit with DAB as the chromogen.



**WB (Western Blot)**

Figure 1. Western blot analysis of GEF-H1/ARHGEF2 using anti-GEF-H1/ARHGEF2 antibody (AAA127130).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 293T whole cell lysates,Lane 2: human Hela whole cell lysates,Lane 3: human PC-3 whole cell lysates,Lane 4: rat brain tissue lysates,Lane 5: rat C6 whole cell lysates,Lane 6: mouse brain tissue lysates,Lane 7: mouse Raw264.7 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-GEF-H1/ARHGEF2 antigen affinity purified polyclonal antibody (#AAA127130) at 0.5ug/mL overnight at 4 degree 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 with Tanon 5200 system. A specific band was detected for GEF-H1/ARHGEF2 at approximately 112 kDa. The expected band size for GEF-H1/ARHGEF2 is at 112 kDa.

**ADDITIONAL INFORMATION**

|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Related Product Information for anti-GEF-H1/ARHGEF2 antibody | 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.                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Product Categories/Family for anti-GEF-H1/ARHGEF2 antibody   | Primary Antibodies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| References                                                   | 1. Aijaz, S., D'Atri, F., Citi, S., Balda, M. S., Matter, K. Binding of GEF-H1 to the tight junction-associated adaptor cingulin results in inhibition of Rho signaling and G1/S phase transition. Dev. Cell 8: 777-786, 2005.2. Ishikawa, K., Nagase, T., Suyama, M., Miyajima, N., Tanaka, A., Kotani, H., Nomura, N., Ohara, O. Prediction of the coding sequences of unidentified human genes. X. The complete sequences of 100 new cDNA clones from brain which can code for large proteins in vitro. DNA Res. 5: 169-176, 1998.3. Krendel, M., Zenke, F. T., Bokoch, G. M. Nucleotide exchange factor GEF-H1 mediates cross-talk between microtubules and the actin cytoskeleton. Nature Cell Biol. 4: 294-301, 2002. |

**NCBI AND UNIPROT INFORMATION**

|                           |                                                                |
|---------------------------|----------------------------------------------------------------|
| NCBI GI #                 | 253735775                                                      |
| NCBI GeneID               | 9181                                                           |
| NCBI Accession #          | NP_001155855.1                                                 |
| NCBI GenBank Nucleotide # | NM_001162383.1                                                 |
| UniProt Accession #       | Q92974; O75142; Q15079; Q5VY92; Q8TDA3; Q8WUG4; Q9H023; D3DVA6 |
| Molecular Weight          | 111,543 Da                                                     |

|                                  |                                                                                                                                                                                                        |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| NCBI Official Full Name          | rho guanine nucleotide exchange factor 2 isoform 1                                                                                                                                                     |
| NCBI Official Synonym Full Names | Rho/Rac guanine nucleotide exchange factor (GEF) 2                                                                                                                                                     |
| NCBI Official Symbol             | ARHGEF2                                                                                                                                                                                                |
| NCBI Official Synonym Symbols    | GEF; P40; GEFH1; LFP40; GEF-H1                                                                                                                                                                         |
| NCBI Protein Information         | rho guanine nucleotide exchange factor 2; microtubule-regulated Rho-GEF; guanine nucleotide exchange factor H1; proliferating cell nucleolar antigen p40; Rho/Rac guanine nucleotide exchange factor 2 |
| UniProt Protein Name             | Rho guanine nucleotide exchange factor 2                                                                                                                                                               |
| UniProt Gene Name                | <b>ARHGEF2</b>                                                                                                                                                                                         |
| UniProt Synonym Gene Names       | KIAA0651; LFP40; GEF-H1                                                                                                                                                                                |
| UniProt Entry Name               | ARHG2_HUMAN                                                                                                                                                                                            |

**For Research Use Only.** Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://stage.aaabiotech.com/polyclonal/gef-h1-arhgef2-antibody-flow-cytometry-immunohistochemistry-western-blot-elisa/127130>