

**RHOG Antibody**  
**Catalog # ASC11858****Specification**

---

**RHOG Antibody - Product Information**

|                   |  |
|-------------------|--|
| Application       | WB, IHC  |
| Primary Accession | <a href="#">P84095</a>                               |
| Other Accession   | <a href="#">NP_001656</a> , <a href="#">46249393</a> |
| Reactivity        | Human, Mouse, Rat                                    |
| Host              | Rabbit   |
| Clonality         | Polyclonal   |
| Isotype           | IgG  |
| Calculated MW     | Predicted: 21 kDa                                    |

|                   |   |
|-------------------|---|
| Application Notes | Observed: 23 kDa KDa<br>RHOG antibody can be used for detection of RHOG by Western blot at 1 - 2 µg/ml. Antibody can also be used for immunohistochemistry starting at 5 µg/mL. |
|-------------------|---|

**RHOG Antibody - Additional Information**

|   |     |
|---|-----|
| Gene ID   | 391 |
| <b>Target/Specificity</b>                             |     |
| RHOG; RHOG antibody is human, mouse and rat reactive. |     |

**Reconstitution & Storage**

RHOG antibody can be stored at 4°C for three months and -20°C, stable for up to one year.

**Precautions**

RHOG Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**RHOG Antibody - Protein Information**

**Name** RHOG

**Synonyms** ARHG

**Function**

Plays a role in immunological synaptic F-actin density and architecture organization (PubMed:<a href="http://www.uniprot.org/citations/33513601" target="\_blank">33513601</a>). Regulates actin reorganization in lymphocytes, possibly through the modulation of Rac1 activity (PubMed:<a href="http://www.uniprot.org/citations/33513601" target="\_blank">33513601</a>). Required for the formation of membrane ruffles during macropinocytosis (PubMed:<a href="http://www.uniprot.org/citations/15133129" target="\_blank">15133129</a>). Plays a role in cell migration and is required for the formation of cup-like structures during trans-endothelial migration of leukocytes (PubMed:<a href="http://www.uniprot.org/citations/17875742" target="\_blank">17875742</a>).

target="\_blank">17875742</a>). Binds phospholipids in an activation-dependent manner; thereby acting as an anchor for other proteins to the plasma membrane (PM) (PubMed:<a href="http://www.uniprot.org/citations/33513601" target="\_blank">33513601</a>). Plays a role in exocytosis of cytotoxic granules (CG) by lymphocytes/Component of the exocytosis machinery in natural killer (NK) and CD8+ T cells (PubMed:<a href="http://www.uniprot.org/citations/33513601" target="\_blank">33513601</a>). Promotes the docking of cytotoxic granules (CG) to the plasma membrane through the interaction with UNC13D (PubMed:<a href="http://www.uniprot.org/citations/33513601" target="\_blank">33513601</a>). Involved in the cytotoxic activity of lymphocytes/primary CD8+ T cells (PubMed:<a href="http://www.uniprot.org/citations/33513601" target="\_blank">33513601</a>).

#### **Cellular Location**

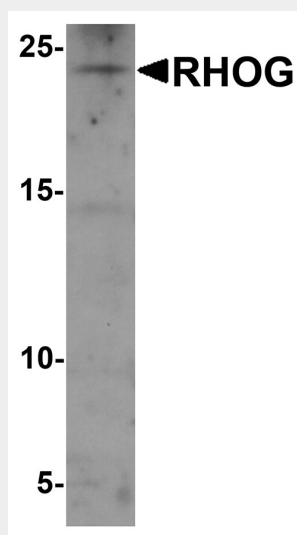
Cell membrane; Lipid-anchor; Cytoplasmic side

#### **RHOG Antibody - Protocols**

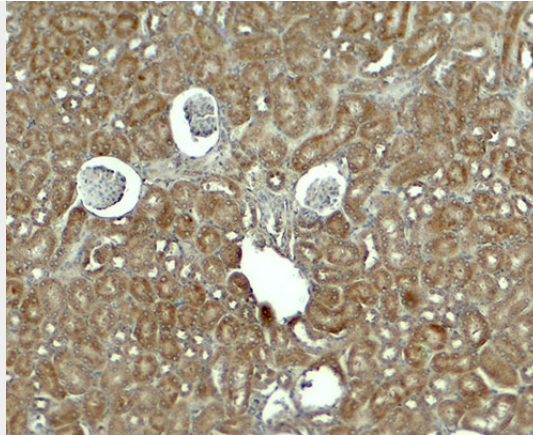
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **RHOG Antibody - Images**



Western blot analysis of RHOG in human kidney tissue lysate with RHOG antibody at 1 µg/ml.



Immunohistochemistry of RHOG in mouse kidney tissue with RHOG antibody at 5 µg/ml.

### **RHOG Antibody - Background**

The ras homolog family member G (RHOG), also known as rho-related GTP-binding protein, is a member of the Rho family of small GTPases, which cycle between inactive GDP-bound and active GTP-bound states and function as molecular switches in signal transduction cascades (1). RHOG controls a pathway that requires the microtubule network and activates Rac1 and Cdc42Hs independently of their growth factor signaling pathway (2). RHOG is also involved in the transcriptional regulation of interferon-gamma and nuclear factor of activated T cells (NFAT) and the regulation of the actin skeleton in lymphocytes (3).

### **RHOG Antibody - References**

Vincent S, Janteur P, and Fort P. Growth-regulated of rhoG, a new member of the ras homolog family. *Mol. Cell Biol.* 1992; 12:3138-48.  
Gauthier-Rouviere C, Vignal E, Meriane M, et al. RhoG GTPase controls a pathway that independently activates Rac1 and Cdc42Hs. *Mol. Biol. Cell* 1998; 9:1379-94.  
Vigorito E, Billadeu DD, Savoy D, et al. RhoG regulates gene expression and the actin skeleton in lymphocytes. *Oncogene* 2003; 22:330-42.