

RHOG Antibody

Catalog # ASC11858

Specification

RHOG Antibody - Product Information

Application	WB, IHC-P, E
Primary Accession	P84095
Other Accession	NP_001656, 46249393
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	Predicted: 21 kDa
Application Notes	<p>Observed: 23 kDa</p> <p>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.</p>

RHOG Antibody - Additional Information

Gene ID	391
Target/Specificity	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:[33513601](http://www.uniprot.org/citations/33513601)). Regulates actin reorganization in lymphocytes, possibly through the modulation of Rac1 activity (PubMed:[33513601](http://www.uniprot.org/citations/33513601)). Required for the formation of membrane ruffles during macropinocytosis (PubMed:[15133129](http://www.uniprot.org/citations/15133129)). Plays a role in cell migration and is required for the formation of cup-like structures during trans-endothelial migration of leukocytes (PubMed:[17875742](http://www.uniprot.org/citations/17875742))

target="_blank">>17875742). Binds phospholipids in an activation-dependent manner; thereby acting as an anchor for other proteins to the plasma membrane (PM) (PubMed:33513601). 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:33513601). Promotes the docking of cytotoxic granules (CG) to the plasma membrane through the interaction with UNC13D (PubMed:33513601). Involved in the cytotoxic activity of lymphocytes/primary CD8+ T cells (PubMed:33513601).

Cellular Location

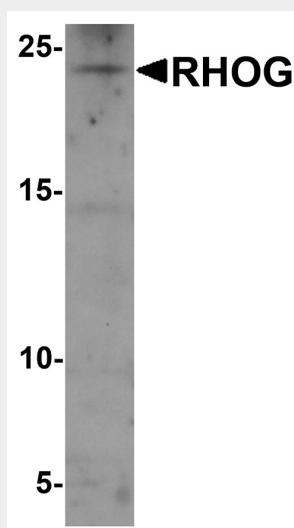
Cell membrane; Lipid-anchor; Cytoplasmic side

RHOG Antibody - Protocols

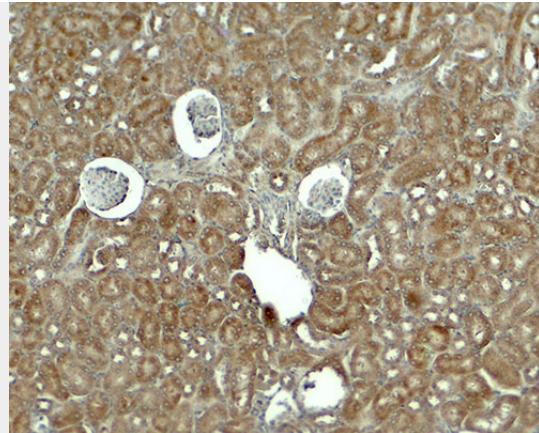
Provided below are standard protocols that you may find useful for product applications.

- [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, Jantue 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.