

### **ARHGDIA Antibody**

Purified Mouse Monoclonal Antibody Catalog # A01737a

## Specification

# **ARHGDIA Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW **Description**  E, WB, IF, FC <u>P52565</u> Human, Mouse, Monkey Mouse Monoclonal IgG1 26kDa KDa

Aplysia Ras-related homologs (ARHs), also called Rho genes, belong to the RAS gene superfamily encoding small guanine nucleotide exchange (GTP/GDP) factors. The ARH proteins may be kept in the inactive, GDP-bound state by interaction with GDP dissociation inhibitors, such as ARHGDIA

#### Immunogen

Purified recombinant fragment of human ARHGDIA (AA: FULL(1-204)) expressed in E. Coli. <br /> <br />

Formulation Purified antibody in PBS with 0.05% sodium azide

### **ARHGDIA Antibody - Additional Information**

Gene ID 396

**Other Names** Rho GDP-dissociation inhibitor 1, Rho GDI 1, Rho-GDI alpha, ARHGDIA, GDIA1

Dilution E~~1/10000 WB~~1/500 - 1/2000 IF~~1/200 - 1/1000 FC~~1/200 - 1/400

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

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

### **ARHGDIA Antibody - Protein Information**



## Name ARHGDIA

Synonyms GDIA1

### Function

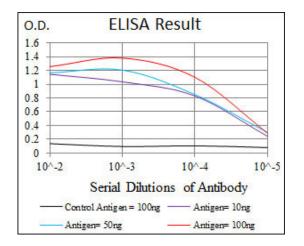
Controls Rho proteins homeostasis. Regulates the GDP/GTP exchange reaction of the Rho proteins by inhibiting the dissociation of GDP from them, and the subsequent binding of GTP to them. Retains Rho proteins such as CDC42, RAC1 and RHOA in an inactive cytosolic pool, regulating their stability and protecting them from degradation. Actively involved in the recycling and distribution of activated Rho GTPases in the cell, mediates extraction from membranes of both inactive and activated molecules due its exceptionally high affinity for prenylated forms. Through the modulation of Rho proteins, may play a role in cell motility regulation. In glioma cells, inhibits cell migration and invasion by mediating the signals of SEMA5A and PLXNB3 that lead to inactivation of RAC1.

Cellular Location Cytoplasm.

# **ARHGDIA Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>



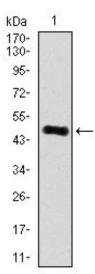


Figure 1: Western blot analysis using ARHGDIA mAb against human ARHGDIA recombinant protein. (Expected MW is 48.7 kDa)

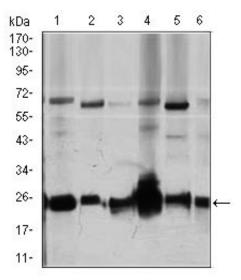


Figure 2: Western blot analysis using ARHGDIA mouse mAb against Jurkat (1), HeLa (2), NIH3T3 (3), C6 (4), K562 (5), and COS7 (6) cell lysate.

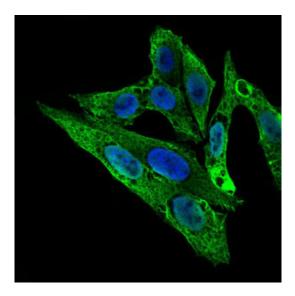




Figure 3: Immunofluorescence analysis of HepG2 cells using ARHGDIA mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

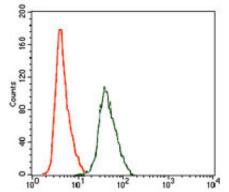


Figure 4: Flow cytometric analysis of HeLa cells using ARHGDIA mouse mAb (green) and negative control (red).

# **ARHGDIA Antibody - References**

1.Nat Cell Biol. 2010 May;12(5):477-83. 2.Int J Oncol. 2010 Feb;36(2):379-86.