10320 Camino Santa Fe, Suite G
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ARHGDIA Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1737a

Specification

ARHGDIA Antibody - Product Information

Application	**WB, FC, ICC, E**
Primary Accession	P52565
Reactivity	**Human, Mouse, Monkey**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG1**
Calculated MW	**26kDa KDa**

Description
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.

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
WB~~1/500 - 1/2000
FC~~1/200 - 1/400
ICC~~N/A
E~~1/10000

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

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Name ARHGDIA

Synonyms GDIA1

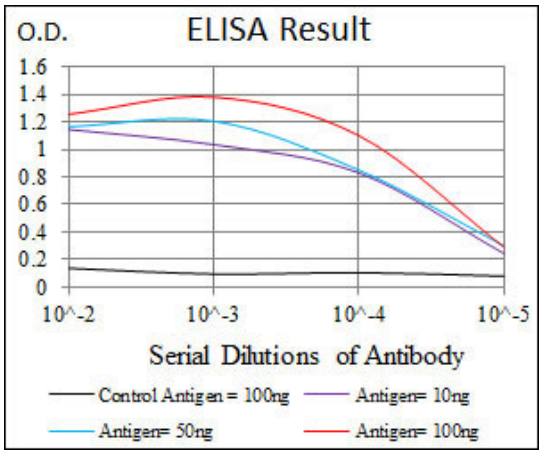
Function
Controls Rho proteins homeostasis. Regulates the GDP/GTP exchange reaction of the Rho proteins by inhibiting the dissociation of GDP from them, and the subsequent binding of GTP to them. Retains Rho proteins such as CDC42, RAC1 and RHOA in an inactive cytosolic pool, regulating their stability 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.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture



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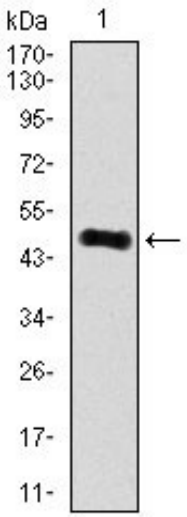

Figure 1: Western blot analysis using ARHGDIA mAb against human ARHGDIA recombinant protein. (Expected MW is 48.7 kDa)

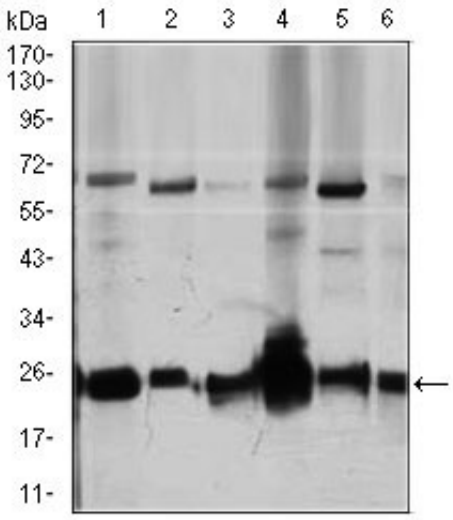

Figure 2: Western blot analysis using ARHGDIA mouse mAb against Jurkat (1), HeLa (2), NIH3T3 (3), C6 (4), K562 (5), and COS7 (6) cell lysate.

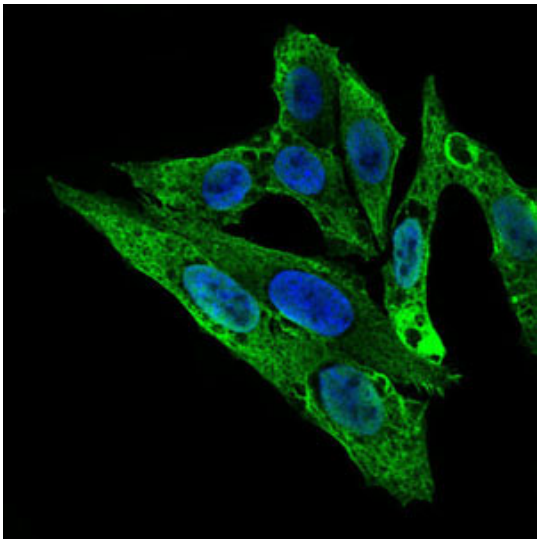

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Figure 3: Immunofluorescence analysis of HepG2 cells using ARHGDIA mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

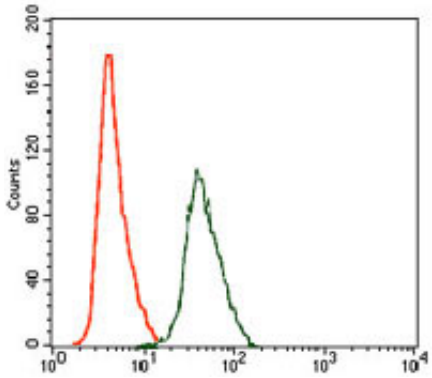

Figure 4: Flow cytometric analysis of HeLa cells using ARHGDIA mouse mAb (green) and negative control (red).

ARHGDIA Antibody - References

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