10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

ARHGDIA Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1737a

Product Information

Application	WB, FC, ICC, E
Primary Accession	P52565
Reactivity	Human, Mouse, Monkey
Host	Mouse
Clonality	Monoclonal
Clone Names	2G3
Isotype	IgG1
Calculated MW	23207
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

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.

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.

References

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

Images

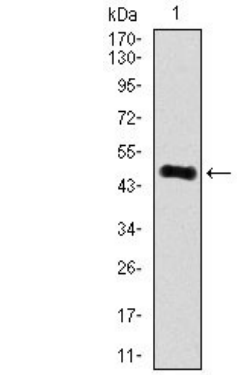


Figure 1: Western blot analysis using ARHGDIA mAb against human ARHGDIA recombinant protein. (Expected MW is 48.7 kDa)

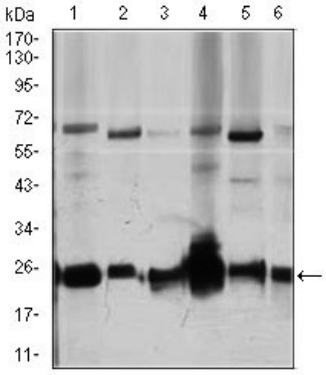


Figure 2: Western blot analysis using ARHGDIA mouse mAb against Jurkat (1), HeLa (2), NIH3T3 (3), C6 (4), K562 (5), and COS7 (6) cell lysate.

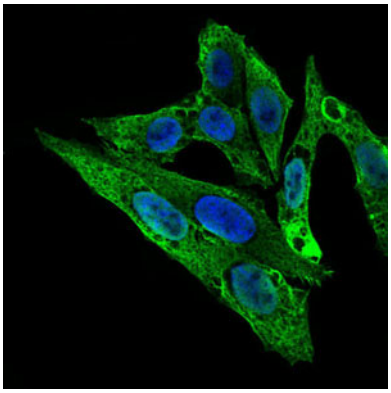
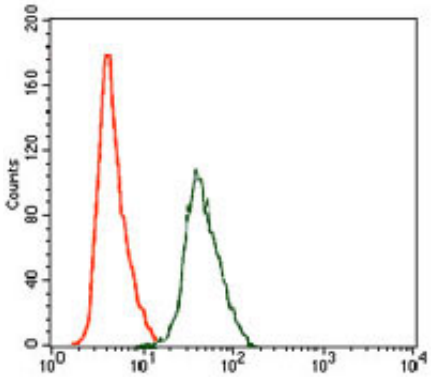


Figure 3: Immunofluorescence analysis of HepG2 cells using ARHGDIA mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye.

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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.