

#### KO-Validated Anti-ARHGDIA Mouse Monoclonal Antibody Mouse monoclonal antibody Catalog # AGI2402

### Specification

## **KO-Validated Anti-ARHGDIA Mouse Monoclonal Antibody - Product Information**

Application Primary Accession	WB, FC, ICC P52565
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Isotype	Mouse IgG1
Calculated MW	Predicted, 23 kDa, observed, 23 kDa KDa
Gene Name	ARHGDIA
Aliases	<b>ARHGDIA; Rho GDP Dissociation Inhibitor</b>
	Alpha; RHOGDI; GDIA1; Rho GDP
	Dissociation Inhibitor (GDI) Alpha; Rho
	GDP-Dissociation Inhibitor 1;
	GDP-Dissociation Inhibitor, Aplysia
	RAS-Related 1; Epididymis Secretory
	Sperm Binding Protein Li 47e; Rho-GDI
	Alpha; HEL-S-47e; Rho GDI 1; RHOGDI-1;
	NPHS8
Immunogen	<b>Recombinant protein of human ARHGDIA</b>

#### KO-Validated Anti-ARHGDIA Mouse Monoclonal Antibody - Additional Information

Gene ID **396** Other Names Rho GDP-dissociation inhibitor 1, Rho GDI 1, Rho-GDI alpha, ARHGDIA, GDIA1

#### **KO-Validated Anti-ARHGDIA Mouse Monoclonal 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.

# KO-Validated Anti-ARHGDIA Mouse Monoclonal 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
- <u>Cell Culture</u>

## KO-Validated Anti-ARHGDIA Mouse Monoclonal Antibody - Images



Western blotting analysis using anti-Rho GDP dissociation inhibitor alpha antibody (Cat#AGI2402). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-Rho GDP dissociation inhibitor alpha antibody (Cat#AGI2402, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-Rho GDP dissociation inhibitor alpha antibody (Cat#AGI2402). Rho GDP dissociation inhibitor alpha expression in wild type (WT) and Rho GDP dissociation inhibitor alpha (ARHGDIA) knockout (KO) HSHC cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-Rho GDP dissociation inhibitor alpha antibody (Cat#AGI2402, 1:5,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.





Rho GDP dissociation inhibitor alpha-Alexa Fluor® 647

Flow cytometric analysis of Rho GDP dissociation inhibitor alpha expression in HepG2 cells using anti-Rho GDP dissociation inhibitor alpha antibody (Cat#AGI2402, 1:2,000). Green, isotype control; red, Rho GDP dissociation inhibitor alpha.



Immunocytochemical staining of HepG2 cells with anti-Rho GDP dissociation inhibitor alpha antibody (Cat#AGI2402, 1:1,000). Nuclei were stained blue with DAPI; Rho GDP dissociation inhibitor alpha was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and Smart Gain[]Medium. Scale bar, 20 μm.