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# ARHGDIA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP2894a

## Product Information

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| **Application** | WB, IHC-P, E |
| **Primary Accession** | P52565 |
| **Other Accession** | Q5XI73, Q99PT1, Q4R4J0, P19803 |
| **Reactivity** | Human, Rat, Mouse |
| **Predicted** | Bovine, Monkey, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Calculated MW** | 23207 |
| **Antigen Region** | 25-53 |

## Additional Information

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| **Gene ID** | 396 |
| **Other Names** | Rho GDP-dissociation inhibitor 1, Rho GDI 1, Rho-GDI alpha, ARHGDIA, GDIA1 |
| **Target/Specificity** | This ARHGDIA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 25-53 amino acids from the N-terminal region of human ARHGDIA. |
| **Dilution** | WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | ARHGDIA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## 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.

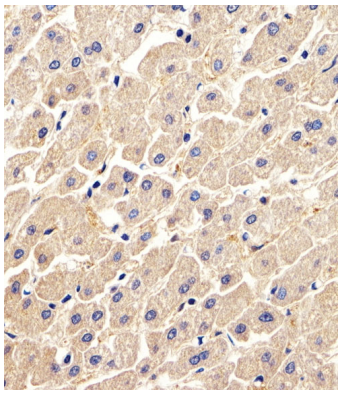
## Background

ARHGDIA 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

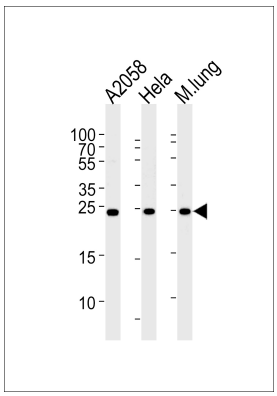
## References

Qiao,J., etc, Am. J. Physiol., Cell Physiol. 295 (5), C1161-C1168 (2008)

## Images



Immunohistochemical analysis of paraffin-embedded H.liver section using ARHGDIA Antibody (N-term)(Cat#AP2894a). AP2894a was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.




ARHGDIA Antibody (N-term) (Cat. #AP2894a) western blot analysis in A2058,Hela cell line and mouse lung lysates (35ug/lane).This demonstrates the ARHGDIA antibody detected the ARHGDIA protein (arrow).