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# ARHGAP18 Antibody

Catalog # ASC11059

## Product Information

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| **Application** | WB, IF, ICC, E |
| **Primary Accession** | Q8N392 |
| **Other Accession** | NP_277050, 39932589 |
| **Reactivity** | Human, Mouse, Rat |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | IgG |
| **Calculated MW** | 74977 |
| **Concentration (mg/ml)** | 1 mg/mL |
| **Conjugate** | Unconjugated |
| **Application Notes** | ARHGAP18 antibody can be used for detection of ARHGAP18 by Western blot at 1 - 2 □g/mL. Antibody can also be used for immunocytochemistry starting at 2.5 □g/mL. For immunofluorescence start at 20 □g/mL. |

## Additional Information

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| **Gene ID** | 93663 |
| **Other Names** | Rho GTPase-activating protein 18, MacGAP, Rho-type GTPase-activating protein 18, ARHGAP18 (HGNC:21035) |
| **Target/Specificity** | ARHGAP18; |
| **Reconstitution & Storage** | ARHGAP18 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures. |
| **Precautions** | ARHGAP18 Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | ARHGAP18 ( HGNC:21035) |
| **Function** | Rho GTPase activating protein that suppresses F-actin polymerization by inhibiting Rho. Rho GTPase activating proteins act by converting Rho-type GTPases to an inactive GDP-bound state (PubMed:21865595). Plays a key role in tissue tension and 3D tissue shape by regulating cortical actomyosin network formation. Acts downstream of YAP1 and inhibits actin polymerization, which in turn reduces nuclear localization of YAP1 (PubMed:25778702). Regulates cell shape, spreading, and migration (PubMed:21865595). |

**Cellular Location** Cytoplasm.

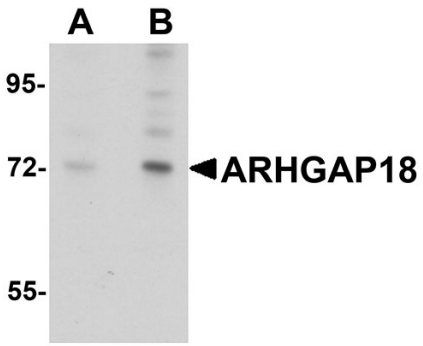
## Background

ARHGAP18 Antibody: ARHGAP18 is one member of the human RhoGAP family with approximately 80 RhoGAP proteins known to be encoded in the human genome. Rho proteins belong to the Ras superfamily that is composed of over 50 members divided into six families, including Ras, Sar, Rho, Ran, Rab and Arf. Rho GTPases are important regulators of the actin cytoskeleton and consequently influence the shape and migration of cells. ARHGAP18 is linked to Ras, and thus, to EGFR-mediated proliferation, migration and differentiation. ARHGAP18 is precisely contained within chromosome 6q22-24, which has been shown to be linked to schizophrenia, suggesting that ARHGEP18 may play a role in this condition.

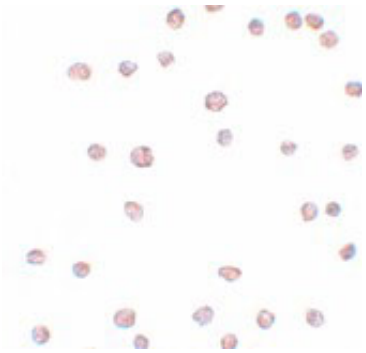
## References

Takai Y, Sasaki T, and Matozaki T. Small GTP-binding proteins. Physiol. Rev.2001; 81:153-208.
Potkin SG, Turner JA, Fallon JA, et al. Gene discovery through imaging genetics: identification of two novel genes associated with schizophrenia. Mol. Psychiatry2009; 14:416-28.

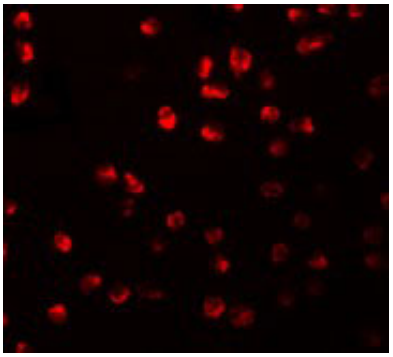
## Images




Western blot analysis of ARHGAP18 in 3T3 cell lysate with ARHGAP18 antibody at (A) 1 and (B) 2 µg/mL.



Immunocytochemistry of ARHGAP18 in 3T3 cells with ARHGAP18 antibody at 2.5 µg/mL.



Immunofluorescence of ARHGAP18 in 3T3 cells with ARHGAP18 antibody at 20 µg/mL.

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