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# RALA Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO2092a

## Product Information

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| **Application** | WB, IHC, FC, ICC, E |
| **Primary Accession** | P11233 |
| **Reactivity** | Human, Mouse, Monkey |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 4G8C7 |
| **Isotype** | IgG1 |
| **Calculated MW** | 23567 |
| **Description** | The product of this gene belongs to the small GTPase superfamily, Ras family of proteins. GTP-binding proteins mediate the transmembrane signaling initiated by the occupancy of certain cell surface receptors. This gene encodes a low molecular mass ras-like GTP-binding protein that shares about 50% similarity with other ras proteins. |
| **Immunogen** | Purified recombinant fragment of human RALA (AA: 71-203) expressed in E. Coli. |
| **Formulation** | Purified antibody in PBS with 0.05% sodium azide |

## Additional Information

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| **Gene ID** | 5898 |
| **Other Names** | Ras-related protein Ral-A, RALA, RAL |
| **Dilution** | WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 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** | RALA Antibody is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | RALA |
| **Synonyms** | RAL |

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| **Function** | Multifunctional GTPase involved in a variety of cellular processes including gene expression, cell migration, cell proliferation, oncogenic transformation and membrane trafficking. Accomplishes its multiple functions by interacting with distinct downstream effectors (PubMed:18756269, PubMed:19306925, PubMed:20005108, PubMed:21822277, PubMed:30500825). Acts as a GTP sensor for GTP-dependent exocytosis of dense core vesicles. The RALA-exocyst complex regulates integrin-dependent membrane raft exocytosis and growth signaling (PubMed:20005108). Key regulator of LPAR1 signaling and competes with GRK2 for binding to LPAR1 thus affecting the signaling properties of the receptor. Required for anchorage- independent proliferation of transformed cells (PubMed:19306925). During mitosis, supports the stabilization and elongation of the intracellular bridge between dividing cells. Cooperates with EXOC2 to recruit other components of the exocyst to the early midbody (PubMed:18756269). During mitosis, also controls mitochondrial fission by recruiting to the mitochondrion RALBP1, which mediates the phosphorylation and activation of DNM1L by the mitotic kinase cyclin B- CDK1 (PubMed:21822277). |
| **Cellular Location** | Cell membrane; Lipid-anchor; Cytoplasmic side. Cleavage furrow. Midbody, Midbody ring. Mitochondrion. Note=Predominantly at the cell surface in the absence of LPA. In the presence of LPA, colocalizes with LPAR1 and LPAR2 in endocytic vesicles (PubMed:19306925). May colocalize with CNTRL/centriolin at the midbody ring (PubMed:16213214). However, localization at the midbody at late cytokinesis was not confirmed (PubMed:18756269). Relocalizes to the mitochondrion during mitosis where it regulates mitochondrial fission (PubMed:21822277) |

## References

1.Cell Signal. 2012 Jun;24(6):1134-40.2.Int J Immunopathol Pharmacol. 2009 Jul-Sep;22(3):735-43.

## Images

