



# ARHGEF18 mouse mAb

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| <b>Catalog No</b>                  | YP-mAb-18050                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Reactivity</b>                  | Human;Mouse;Rat                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Applications</b>                | WB                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Gene Name</b>                   | ARHGEF18 KIAA0521                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Immunogen</b>                   | Synthesized peptide derived from human ARHGEF18                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Specificity</b>                 | This antibody detects endogenous levels of ARHGEF18 at Human, Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Source</b>                      | Monoclonal, Mouse,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Purification</b>                | The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Dilution</b>                    | WB 1:500-1:2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Synonyms</b>                    | 114 kDa Rho-specific guanine nucleotide exchange factor;KIAA0521;p114 Rho GEF;P114 RhoGEF;p114RhoGEF;ARHGEF18;ARHGEF18 KIAA0521;Rho guanine nucleotide exchange factor 18 (114 kDa Rho-specific guanine nucleotide exchange factor) (p114-Rho-GEF) (p114RhoGEF) (Septin-associated RhoGEF) (SA-RhoGEF)                                                                                                                                                                                                                                          |
| <b>Observed Band</b>               | 120-130 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Calculated Molecular Weight</b> | 131 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Cell Pathway</b>                | Cytoplasm . Cytoplasm, cytoskeleton . Cell membrane . Apical cell membrane . In unactivated eosinophils, distributed around the cell periphery in the perimembranous region (PubMed:29601110). In activated eosinophils, relocates to the tip of the nucleopod, a membrane structure formed during activation when the nucleus moves to one end of the cell, and is also concentrated in membrane protrusions at the opposite end of the cell (PubMed:29601110). Localizes to the apical cell membrane in epithelial cells (PubMed:22006950). . |
| <b>Tissue Specificity</b>          | Expressed in all tissues tested with highest expression in kidney and pancreas. Weakly or not expressed in liver, skeletal muscle and testis. Isoform 1: Expressed in eosinophils (PubMed:29601110). Isoform 2: Expressed in eosinophils (PubMed:29601110). Isoform 3: Expressed in eosinophils (PubMed:29601110). Isoform 4: Not detected in eosinophils (PubMed:29601110)                                                                                                                                                                     |

**Function**

Acts as guanine nucleotide exchange factor (GEF) for RhoA GTPases. Its activation induces formation of actin stress fibers. Also acts as a GEF for RAC1, inducing production of reactive oxygen species (ROS). Does not act as a GEF for CDC42. The G protein beta-gamma (Gbetagamma) subunits of heterotrimeric G proteins act as activators, explaining the integrated effects of LPA and other G-protein coupled receptor agonists on actin stress fiber formation, cell shape change and ROS production. Required for EPB41L4B-mediated regulation of the circumferential actomyosin belt in epithelial cells .

**Background****matters needing attention**

Avoid repeated freezing and thawing!

**Usage suggestions**

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

**Products Images**