

# Anti-Rab5 RAB5A Rabbit Monoclonal Antibody

Catalog # ABO13383

## Product Information

---

|                          |                                                                                                                           |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>Application</b>       | WB, IHC                                                                                                                   |
| <b>Primary Accession</b> | <a href="#">P20339</a>                                                                                                    |
| <b>Host</b>              | Rabbit                                                                                                                    |
| <b>Isotype</b>           | Rabbit IgG                                                                                                                |
| <b>Reactivity</b>        | Rat, Human, Mouse                                                                                                         |
| <b>Clonality</b>         | Monoclonal                                                                                                                |
| <b>Format</b>            | Liquid                                                                                                                    |
| <b>Description</b>       | Anti-Rab5 RAB5A Rabbit Monoclonal Antibody . Tested in WB, IHC applications. This antibody reacts with Human, Mouse, Rat. |

## Additional Information

---

|                                 |                                                                                                                                                                                                                                                                          |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene ID</b>                  | 5868                                                                                                                                                                                                                                                                     |
| <b>Other Names</b>              | Ras-related protein Rab-5A, 3.6.5.2, RAB5A, RAB5                                                                                                                                                                                                                         |
| <b>Calculated MW</b>            | 23659                                                                                                                                                                                                                                                                    |
| <b>Application Details</b>      | WB 1:500-1:2000<br>IHC 1:50-1:200                                                                                                                                                                                                                                        |
| <b>Subcellular Localization</b> | Cell membrane ; Lipid-anchor ; Cytoplasmic side. Early endosome membrane ; Lipid-anchor. Melanosome. Cytoplasmic vesicle. Cell projection, ruffle. Membrane. Cytoplasm, cytosol. Enriched in stage I melanosomes. Alternates between membrane-bound and cytosolic forms. |
| <b>Source</b>                   | Eukaryota                                                                                                                                                                                                                                                                |
| <b>Contents</b>                 | Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.                                                                                                                                                      |
| <b>Clone Names</b>              | Clone: EOE-18                                                                                                                                                                                                                                                            |
| <b>Immunogen</b>                | A synthesized peptide derived from human Rab5                                                                                                                                                                                                                            |
| <b>Purification</b>             | Affinity-chromatography                                                                                                                                                                                                                                                  |
| <b>Storage</b>                  | Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.                                                                                                                               |

## Protein Information

---

|             |                                     |
|-------------|-------------------------------------|
| <b>Name</b> | RAB5A ( <a href="#">HGNC:9783</a> ) |
|-------------|-------------------------------------|

## Synonyms

RAB5

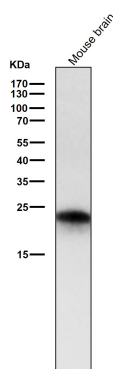
## Function

The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. RAB5A is required for the fusion of plasma membranes and early endosomes and involved in early endocytic trafficking (PubMed:[10818110](#), PubMed:[14617813](#), PubMed:[15378032](#), PubMed:[16086013](#), PubMed:[16410077](#), PubMed:[17562788](#)). Required for EEA1 recruitment to early endosomes (PubMed:[16086013](#), PubMed:[17562788](#)). Recruits FERRY complex to early endosomes, where FERRY links early endosomes with a subgroup of mRNAs to enable mRNA intracellular distribution (PubMed:[37267906](#)). Recruits RABEP1/Rabaptin- 5 effector to early endosomes, thereby promoting endocytic membrane fusion (By similarity). Required for EGF and transferrin endocytosis and trafficking through early endosomes (PubMed:[16086013](#), PubMed:[17562788](#)). Contributes to the regulation of filopodia extension (PubMed:[14978216](#)). Required for the exosomal release of SDCBP, CD63, PDCD6IP and syndecan (PubMed:[22660413](#)). Regulates maturation of apoptotic cell-containing phagosomes, probably downstream of DYN2 and PIK3C3 (By similarity).

## Cellular Location

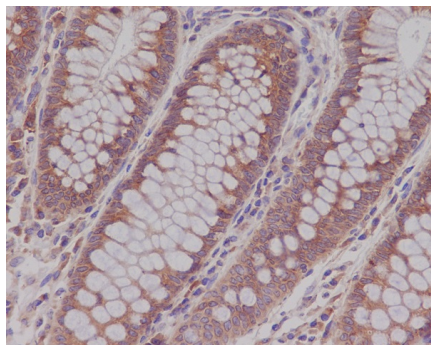
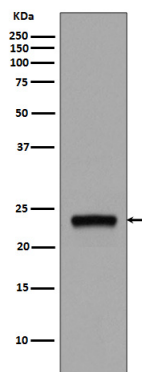
Cell membrane; Lipid-anchor; Cytoplasmic side. Early endosome membrane; Lipid-anchor. Melanosome Cytoplasmic vesicle. Cell projection, ruffle {ECO:0000250|UniProtKB:P18066}. Membrane. Cytoplasm, cytosol. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:Q9CQD1}. Endosome membrane Note=Enriched in stage I melanosomes (PubMed:17081065). Alternates between membrane-bound and cytosolic forms (Probable) {ECO:0000269|PubMed:17081065, ECO:0000305}

## Images



All lanes use the Antibody at 1:5K dilution for 1 hour at room temperature.

Western blot analysis of Rab5 expression in MCF-7 cell lysate.



Immunohistochemical analysis of paraffin-embedded human colon, using Rab5 Antibody.

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