

**Rab5a Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2187a**

**Specification**

**Rab5a Antibody - Product Information**

Application	<b>E, WB, IF, FC, IHC</b>
Primary Accession	<a href="#">P20339</a>
Reactivity	<b>Human</b>
Host	<b>Mouse</b>
Clonality	<b>Monoclonal</b>
Isotype	<b>IgG1</b>
Calculated MW	<b>23.7kDa KDa</b>

**Description**

RAB5A (RAB5A, Member RAS Oncogene Family) is a Protein Coding gene. Diseases associated with RAB5A include borna disease and choroideremia. Among its related pathways are Ras signaling pathway and Endocytosis. GO annotations related to this gene include GTP binding and GDP binding. An important paralog of this gene is RAB5C.

**Immunogen**

Purified recombinant fragment of human Rab5a (AA: 1-215) expressed in E. Coli.

**Formulation**

Purified antibody in PBS with 0.05% sodium azide

**Rab5a Antibody - Additional Information**

**Gene ID** 5868

**Other Names**

Ras-related protein Rab-5A, RAB5A, RAB5

**Dilution**

E~~1/10000  
WB~~1/500 - 1/2000  
IF~~1/200 - 1/1000  
FC~~1/200 - 1/400  
IHC~~1/200 - 1/1000

**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**

Rab5a Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**Rab5a Antibody - Protein Information**

**Name** RAB5A

**Synonyms** RAB5

### Function

Small GTPase which cycles between active GTP-bound and inactive GDP-bound states. In its active state, binds to a variety of effector proteins to regulate cellular responses such as of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Active GTP-bound form 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 (PubMed:<a href="http://www.uniprot.org/citations/10818110" target="\_blank">10818110</a>, PubMed:<a href="http://www.uniprot.org/citations/14617813" target="\_blank">14617813</a>, PubMed:<a href="http://www.uniprot.org/citations/15378032" target="\_blank">15378032</a>, PubMed:<a href="http://www.uniprot.org/citations/16410077" target="\_blank">16410077</a>). Contributes to the regulation of filopodia extension (PubMed:<a href="http://www.uniprot.org/citations/14978216" target="\_blank">14978216</a>). Required for the exosomal release of SDCBP, CD63, PDCD6IP and syndecan (PubMed:<a href="http://www.uniprot.org/citations/22660413" target="\_blank">22660413</a>). 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}

### Rab5a Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)