

**Rab5a Antibody**  
**Purified Mouse Monoclonal Antibody**  
**Catalog # AO2186a****Specification****Rab5a Antibody - Product Information**

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

**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**

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**

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

**Rab5a Antibody - Protein Information**

**Name** RAB5A ([HGNC:9783](#))

**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 (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, PDZD6IP 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](#)