10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Rab5a Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO2187a

Specification

Rab5a Antibody - Product Information

Application	**E, WB, IF, FC, IHC**
Primary Accession	P20339
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
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

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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:10818110, PubMed:14617813, PubMed:15378032, PubMed:16410077). 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}

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 Cytomety
- Cell Culture