

RAB27A Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8511b

Specification

RAB27A Antibody - Product Information

Application WB, FC,E
Primary Accession P51159
Reactivity Human
Host Mouse
Clonality monoclonal
Isotype IgG1,k
Calculated MW 24868

RAB27A Antibody - Additional Information

Gene ID 5873

Other Names

Ras-related protein Rab-27A, Rab-27, GTP-binding protein Ram, RAB27A, RAB27

Target/Specificity

This RAB27A antibody is generated from a mouse immunized with a recombinant protein of human RAB27A.

Dilution

WB~~1:2000

FC~~1:25

E~~Use at an assay dependent concentration.

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions

RAB27A Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

RAB27A Antibody - Protein Information

Name RAB27A

Synonyms RAB27

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 homeostasis of late endocytic pathway, including endosomal positioning, maturation and secretion (PubMed: 30771381). Plays a role in cytotoxic granule exocytosis in lymphocytes. Required for both granule maturation and

granule docking and priming at the immunologic synapse.

Cellular Location

Membrane; Lipid-anchor. Melanosome. Late endosome. Lysosome. Note=Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:12643545, PubMed:17081065). Localizes to endosomal exocytic vesicles (PubMed:17237785).

Tissue Location

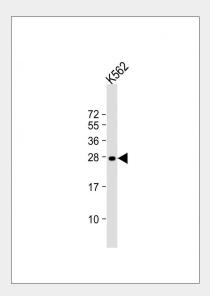
Found in all the examined tissues except in brain. Low expression was found in thymus, kidney, muscle and placenta Detected in melanocytes, and in most tumor cell lines examined Expressed in cytotoxic T-lymphocytes (CTL) and mast cells

RAB27A Antibody - Protocols

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

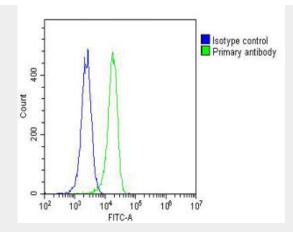
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

RAB27A Antibody - Images



Anti-RAB27A Antibody at 1:2000 dilution + K562 whole cell lysate Lysates/proteins at 20 μ g per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 25 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Overlay histogram showing K562 cells stained with AM8511b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8511b, 1:25 dilution) for 60 min at 37 $^{\circ}$ C. The secondary antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OJ192088) at 1/200 dilution for 40 min at 37 $^{\circ}$ C. Isotype control antibody (blue line) was mouse IgG1 (1 μ g/1x10 $^{\circ}$ 6 cells) used under the same conditions. Acquisition of >10, 000 events was performed.

RAB27A Antibody - Background

Plays a role in cytotoxic granule exocytosis in lymphocytes. Required for both granule maturation and granule docking and priming at the immunologic synapse.

RAB27A Antibody - References

Seabra M.C., et al.J. Biol. Chem. 270:24420-24427(1995). Seabra M.C., et al. Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases. Chen D., et al. Biochem. Mol. Med. 60:27-37(1997). Tolmachova T., et al. Gene 239:109-116(1999).

Hu R.-M., et al. Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).