

RAB27A Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1951a

Specification

RAB27A Antibody - Product Information

Application	E, WB
Primary Accession	P51159
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG2b
Calculated MW	24.9kDa KDa

Description

The protein encoded by this gene belongs to the small GTPase superfamily, Rab family. The protein is membrane-bound and may be involved in protein transport and small GTPase mediated signal transduction. Mutations in this gene are associated with Griscelli syndrome type 2. Alternative splicing occurs at this locus and four transcript variants encoding the same protein have been identified.

Immunogen

Purified recombinant fragment of human RAB27A (AA: FULL(1-221)) expressed in E. Coli.

Formulation

Purified antibody in PBS with 0.05% sodium azide.

RAB27A Antibody - Additional Information

Gene ID 5873

Other Names

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

Dilution

E~~1/10000

WB~~1/500 - 1/2000

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

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).

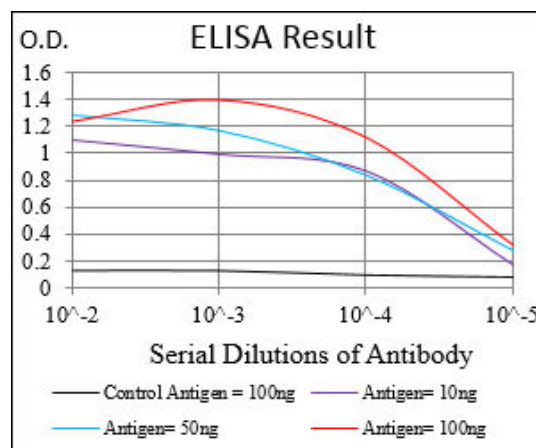
Tissue Location

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](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



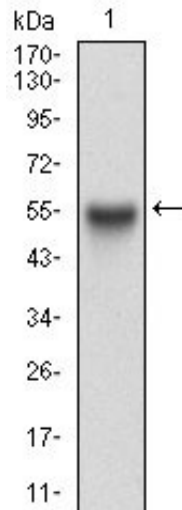


Figure 1: Western blot analysis using RAB27A mAb against human RAB27A (AA: FULL(1-221)) recombinant protein. (Expected MW is 50.8 kDa)

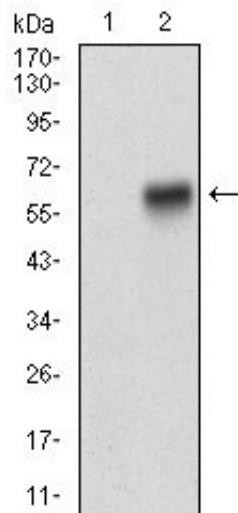


Figure 2: Western blot analysis using RAB27A mAb against HEK293 (1) and RAB27A (AA: FULL(1-221))-hlgGfc transfected HEK293 (2) cell lysate.

RAB27A Antibody - Background

The protein encoded by this gene belongs to the cyclic nucleotide phosphodiesterase (PDE) family, and PDE1 subfamily. Members of the PDE1 family are calmodulin-dependent PDEs that are stimulated by a calcium-calmodulin complex. This PDE has dual-specificity for the second messengers, cAMP and cGMP, with a preference for cGMP as a substrate. cAMP and cGMP function as key regulators of many important physiological processes. Alternatively spliced transcript variants encoding different isoforms have been described for this gene. ; ;

RAB27A Antibody - References

1. PLoS One. 2012;7(7):e411160.2. J Biol Chem. 2011 Feb 18;286(7):5375-82.