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

RAB27A Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP20264b

Product Information

Application	WB, E
Primary Accession	P51159
Other Accession	Q99P74, Q99P58, P23640, Q4LE85, Q9ERI2, NP_004571.2
Reactivity	Human, Rat, Mouse
Predicted	Mouse, Pig, Rat, Bovine, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB42745
Calculated MW	24868
Antigen Region	136-164

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 rabbits immunized with a KLH conjugated synthetic peptide between 136-164 amino acids from the C-terminal region of human RAB27A.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
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 (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAB27A (HGNC:9766)
Synonyms	RAB27

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 (PubMed:30771381). RAB27A regulates 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 (PubMed:18812475).
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

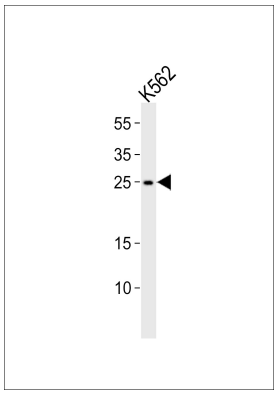
Background

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.

References

Ohbayashi, N., et al. Pigment Cell Melanoma Res 23(3):365-374(2010)
Davila, S., et al. Genes Immun. 11(3):232-238(2010)
Meeths, M., et al. Pediatr Blood Cancer 54(4):563-572(2010)
Chattopadhyay, I., et al. Mutat. Res. 696(2):130-138(2010)
Wood, S.M., et al. Blood 114(19):4117-4127(2009)

Images



Western blot analysis of lysate from K562 cell line, using RAB27A Antibody (C-term)(Cat. #AP20264b). AP20264b was diluted at 1:1000. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody. Lysate at 35ug.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.