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Rab27a Rabbit pAb

Catalog # AP97169

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	P51159
Other Accession	P51159
Reactivity	Human
Predicted	Rat, Pig, Mouse, Rabbit, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24868
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Rab27a
Epitope Specificity	1-100/221
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the small GTPase superfamily. Rab family.
SUBUNIT	Binds SYTL1, SLAC2B, MYRIP, SYTL3, SYTL4 and SYTL5 (By similarity). Binds MLPH and SYTL2. Interacts with UNC13D.
DISEASE	Griscelli syndrome 2 (GS2) [MIM:607624]: Rare autosomal recessive disorder that results in pigmentary dilution of the skin and hair, the presence of large clumps of pigment in hair shafts, and an accumulation of melanosomes in melanocytes. GS2 patients also develop an uncontrolled T-lymphocyte and macrophage activation syndrome, known as hemophagocytic syndrome, leading to death in the absence of bone marrow transplantation. Neurological impairment is present in some patients, likely as a result of hemophagocytic syndrome. Note=The disease is caused by mutations affecting the gene represented in this entry.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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. [provided by RefSeq].

Additional Information

Gene ID	5873
Other Names	GS2; HsT18676; RAB27; RAM; 2210402C08Rik; 2410003M20Rik; 4933437C11Rik; ash; RB27A_HUMAN; RAB27A; Rab-27; GTP-binding protein Ram; 3.6.5.2; RB27A_MOUSE; RB27A_RAT; Ram p25; RAB27A, member RAS oncogene family

Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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

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