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RAB32 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17478a

Product Information

Application	WB, E
Primary Accession	Q13637
Other Accession	NP_006825.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37510
Calculated MW	24997
Antigen Region	2-28

Additional Information

Gene ID	10981
Other Names	Ras-related protein Rab-32, RAB32
Target/Specificity	This RAB32 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 2-28 amino acids from the N-terminal region of human RAB32.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.05% (V/V) Proclin 300. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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	RAB32 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAB32 (HGNC:9772)
Function	The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed:11784320, PubMed:21808068). Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit

	to membranes different set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion (PubMed:11784320). Also acts as an A-kinase anchoring protein by binding to the type II regulatory subunit of protein kinase A and anchoring it to the mitochondrion. Also involved in synchronization of mitochondrial fission (PubMed:12186851). Plays a role in the maturation of phagosomes that engulf pathogens, such as S.aureus and M.tuberculosis (PubMed:21255211). Plays an important role in the control of melanin production and melanosome biogenesis (PubMed:23084991). In concert with RAB38, regulates the proper trafficking of melanogenic enzymes TYR, TYRP1 and DCT/TYRP2 to melanosomes in melanocytes (By similarity). Stimulates phosphorylation of RAB10 'Thr-73' by LRRK2 (PubMed:38127736).
Cellular Location	Mitochondrion. Mitochondrion outer membrane; Lipid-anchor. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle, phagosome membrane; Lipid-anchor; Cytoplasmic side. Melanosome {ECO:0000250|UniProtKB:Q9CZE3}. Melanosome membrane. Note=Recruited to phagosomes containing S.aureus or M.tuberculosis (PubMed:21255211). The BLOC-3 complex, a heterodimer of HPS1 and HPS4 promotes its membrane localization (PubMed:23084991).
Tissue Location	Widely expressed with high levels in heart, liver, kidney, bone marrow, testis, colon and fetal lung

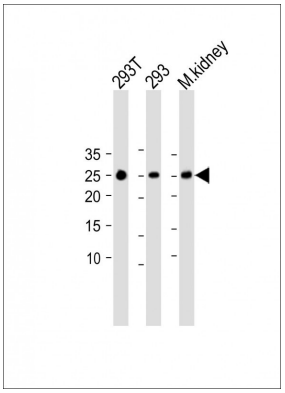
Background

Small GTP-binding proteins of the RAB family, such as RAB32, play essential roles in vesicle and granule targeting (Bao et al., 2002 [PubMed 11784320]).

References

Hirota, Y., et al. Cell. Mol. Life Sci. 66(17):2913-2932(2009)
Shibata, D., et al. Int. J. Cancer 119(4):801-806(2006)
Mungall, A.J., et al. Nature 425(6960):805-811(2003)
Alto, N.M., et al. J. Cell Biol. 158(4):659-668(2002)
Bao, X., et al. Eur. J. Biochem. 269(1):259-271(2002)

Images



All lanes: Anti-RAB32 Antibody (N-term) at 1:2000 dilution Lane 1: 293T whole cell lysate Lane 2: 293 whole cell lysate Lane 3: Mouse kidney lysate Lysates/proteins at 20 µg per lane. Secondary: Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated (ASP1615) at 1/15000 dilution. Observed band size: 25 KDa Blocking/Dilution buffer: 5% NFDM/TBST.