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

RAB32 Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5040

Product Information

Application	WB
Primary Accession	Q13637
Other Accession	NP_006825.1
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Calculated MW	24997
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	10981
Antigen Region	2-28
Other Names	RAB32; Ras-related protein Rab-32
Dilution	WB~~1:1000
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.
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	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

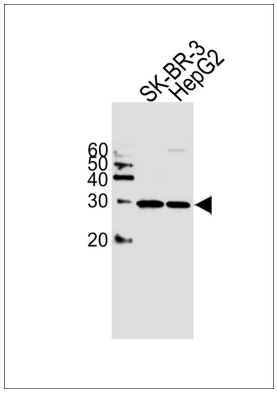
Background

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



Western blot analysis of lysates from SK-BR-3, HepG2 cell line (from left to right), using RAB32 Antibody (N-term)(Cat. #AW5040). AW5040 was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:10000 dilution was used as the secondary antibody.