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RAB14 Antibody

Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8601b

Product Information

Application	WB, E
Primary Accession	P61106
Other Accession	Q5ZKU5, Q91V41, Q5R8Z8
Reactivity	Human, Rat, Mouse
Predicted	Chicken, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	IgG1,k
Clone Names	1779CT692.32.86
Calculated MW	23897

Additional Information

Gene ID	51552
Other Names	Ras-related protein Rab-14, RAB14
Target/Specificity	This RAB14 antibody is generated from a mouse immunized with a recombinant protein of human RAB14.
Dilution	WB~~1:2000 E~~Use at an assay dependent concentration.
Format	Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, 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	RAB14 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAB14 (HGNC:16524)
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 set of downstream effectors directly responsible for vesicle formation, movement,

tethering and fusion (PubMed:22595670). Involved in membrane trafficking between the Golgi complex and endosomes during early embryonic development (By similarity). Regulates the Golgi to endosome transport of FGFR-containing vesicles during early development, a key process for developing basement membrane and epiblast and primitive endoderm lineages during early postimplantation development. May act by modulating the kinesin KIF16B-cargo association to endosomes (By similarity). Regulates, together with its guanine nucleotide exchange factor DENND6A, the specific endocytic transport of ADAM10, N-cadherin/CDH2 shedding and cell-cell adhesion (PubMed:22595670). Mediates endosomal tethering and fusion through the interaction with RUFY1 and RAB4B (PubMed:20534812). Interaction with RAB11FIP1 may function in the process of neurite formation (PubMed:26032412).

Cellular Location

Recycling endosome. Early endosome membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus, trans-Golgi network membrane; Lipid-anchor; Cytoplasmic side. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle. Note=Recruited to recycling endosomes by DENND6A (PubMed:22595670). Recruited to phagosomes containing S.aureus or M.tuberculosis (PubMed:21255211). Colocalizes with RAB11FIP1 on punctate vesicles (PubMed:26032412).

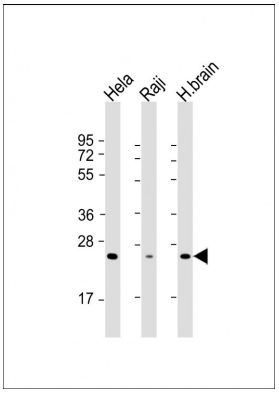
Background

Involved in membrane trafficking between the Golgi complex and endosomes during early embryonic development. Regulates the Golgi to endosome transport of FGFR-containing vesicles during early development, a key process for developing basement membrane and epiblast and primitive endoderm lineages during early postimplantation development. May act by modulating the kinesin KIF16B-cargo association to endosomes (By similarity). Regulates, together with its guanine nucleotide exchange factor DENND6A, the specific endocytic transport of ADAM10, N- cadherin/CDH2 shedding and cell-cell adhesion.

References

Proikas-Cezanne T.,et al.Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases.
Ren Y.,et al.Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
Huang Y.-P.,et al.Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
Hu R.-M.,et al.Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).
Bechtel S.,et al.BMC Genomics 8:399-399(2007).

Images



All lanes : Anti-RAB14 Antibody at 1:2000 dilution Lane 1: Hela whole cell lysate Lane 2: Raji whole cell lysate Lane 3: human brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 24 kDa Blocking/Dilution buffer: 5% NFDM/TBST.