

RAB14 Antibody [Knockdown Validated]

Purified Mouse Monoclonal Antibody (Mab)

Catalog # AM8601b

Product Information

Application	WB, E
Primary Accession	P61106
Other Accession	Q5ZKU5 , Q91V41 , Q5R8Z8
Reactivity	Human, Mouse, Rat
Predicted	Mouse, Chicken
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 [Knockdown Validated] 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](#)). RAB14 is 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).

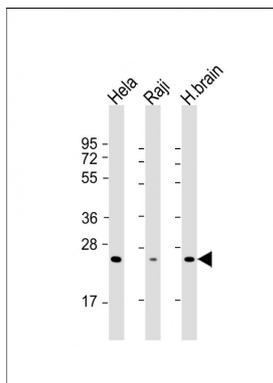
Background

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

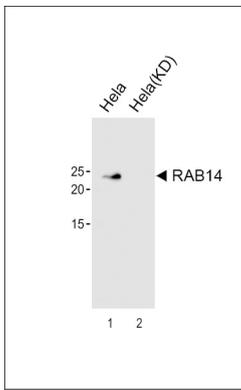
- Proikas-Cezanne T., et al. Submitted (MAY-1999) to the EMBL/GenBank/DDBJ databases.
Ren Y., et al. Submitted (NOV-1999) to the EMBL/GenBank/DDBJ databases.
Huang Y.-P., et al. Submitted (FEB-2004) to the EMBL/GenBank/DDBJ databases.
Hu R.-M., et al. Proc. Natl. Acad. Sci. U.S.A. 97:9543-9548(2000).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

All lanes : Anti-RAB14 Antibody at 1:2000 dilution Lane 1:



Hela Lane 2: Hela-Knockdown Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Mouse IgG, (H+L), Peroxidase conjugated (ASP1613) at 1/8000 dilution.

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