

RAB2A antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # AI14677

Product Information

Application WB Primary Accession P61019

Other Accession NM 002865, NP 002856

Reactivity Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Guinea Pig, Horse,

Bovine

Predicted Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Chicken, Dog, Guinea Pig, Bovine

HostRabbitClonalityPolyclonalCalculated MW23546

Additional Information

Gene ID 5862

Alias Symbol RAB2, LHX

Other Names Ras-related protein Rab-2A, RAB2A, RAB2

Format Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium

azide and 2% sucrose.

Reconstitution & Storage Add 50 ul of distilled water. Final anti-RAB2A antibody concentration is 1

mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at

20°C. Avoid repeat freeze-thaw cycles.

Precautions RAB2A antibody - C-terminal region is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name RAB2A (HGNC:9763)

Synonyms RAB2

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 active GTP-bound and inactive GDP-bound states. In their active state, drive transport of vesicular carriers from donor organelles to acceptor organelles to regulate the membrane traffic that maintains organelle identity and morphology (PubMed:37821429). RAB2A regulates autophagy by promoting autophagosome-lysosome fusion via recruitment of the HOPS endosomal tethering complex; this process involves

autophagosomal RAB2A and lysosomal RAB39A recruitment of HOPS subcomplexes VPS39-VPS11 and VPS41-VPS16-VPS18-VPS33A, respectively, which assemble into a functional complex to mediate membrane tethering and SNAREs-driven membrane fusion (PubMed:37821429). Required for protein transport from the endoplasmic reticulum to the Golgi complex. Regulates the compacted morphology of the Golgi (PubMed:26209634). Together with RAB2B, redundantly required for efficient autophagic flux (PubMed:28483915).

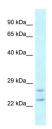
Cellular Location

Endoplasmic reticulum-Golgi intermediate compartment membrane; Lipid-anchor; Cytoplasmic side Melanosome. Endoplasmic reticulum membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus membrane; Lipid-anchor; Cytoplasmic side. Cytoplasmic vesicle, secretory vesicle, acrosome {ECO:0000250|UniProtKB:P53994}. Cytoplasmic vesicle, autophagosome membrane {ECO:0000250|UniProtKB:P53994}; Lipid-anchor; Cytoplasmic side Note=Localized in the Golgi apparatus in the round spermatids and in the acrosome in the elongating spermatid (By similarity). Identified by mass spectrometry in melanosome fractions from stage I to stage IV (PubMed:17081065). {ECO:0000250|UniProtKB:P53994, ECO:0000269|PubMed:17081065}

References

Tachibana K., et al. Nucleic Acids Res. 16:10368-10368(1988). Zahraoui A., et al. J. Biol. Chem. 264:12394-12401(1989). Puhl H.L. III, et al. Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases. Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004).

Images



RAB2A antibody - C-terminal region (AI14677) validated by WB using MDA-MB435S cell lysate at 1 μ g/ml.RAB2A is strongly supported by BioGPS gene expression data to be expressed in Human MDA-MB435 cells

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