

Rab10 antibody - C-terminal region

Rabbit Polyclonal Antibody Catalog # Al10191

Specification

Rab10 antibody - C-terminal region - Product Information

Application WB
Primary Accession P61027

Other Accession NM 016676, NP 057885

Reactivity Human, Mouse, Rat, Zebrafish, Pig, Sheep,

Horse, Bovine, Dog

Predicted Human, Mouse, Rat, Zebrafish, Pig,

Chicken, Sheep, Bovine, Guinea Pig, Dog

Host Rabbit
Clonality Polyclonal
Calculated MW 22kDa KDa

Rab10 antibody - C-terminal region - Additional Information

Gene ID 19325

Alias Symbol AW107754

Other Names

Ras-related protein Rab-10, Rab10

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-Rab10 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

Rab10 antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Rab10 antibody - C-terminal region - Protein Information

Name Rab10

Function

The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes (By similarity). 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 (By similarity). That Rab is mainly involved in the biosynthetic transport of proteins from the Golgi to the plasma membrane (By similarity). Regulates, for instance, SLC2A4/GLUT4 glucose transporter-enriched vesicles delivery to the plasma membrane



(PubMed:17403373, PubMed:22908308, PubMed:27354378). In parallel, it regulates the transport of TLR4, a toll-like receptor to the plasma membrane and therefore may be important for innate immune response (PubMed:20643919). Also plays a specific role in asymmetric protein transport to the plasma membrane (By similarity). In neurons, it is involved in axonogenesis through regulation of vesicular membrane trafficking toward the axonal plasma membrane (By similarity). In epithelial cells, it regulates transport from the Golgi to the basolateral membrane (By similarity). May play a role in the basolateral recycling pathway and in phagosome maturation (By similarity). May play a role in endoplasmic reticulum dynamics and morphology controlling tubulation along microtubules and tubules fusion (By similarity). Together with LRRK2, RAB8A, and RILPL1, it regulates ciliogenesis (By similarity). When phosphorylated by LRRK2 on Thr-73, it binds RILPL1 and inhibits ciliogenesis (By similarity). Participates in the export of a subset of neosynthesized proteins through a Rab8- Rab10-Rab11-dependent endososomal export route (By similarity).

Cellular Location

Cytoplasmic vesicle membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus, trans-Golgi network membrane {ECO:0000250|UniProtKB:P24409}. Endosome membrane {ECO:0000250|UniProtKB:P61026}. Recycling endosome membrane {ECO:0000250|UniProtKB:P24409}. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:P24409}. Cytoplasm, cytoskeleton, cilium basal body Endoplasmic reticulum membrane Cytoplasm, perinuclear region Note=Associates with SLC2A4/GLUT4 storage vesicles (PubMed:27354378) Localizes to the base of the cilium when phosphorylated by LRRK2 on Thr-73 (PubMed:20576682, PubMed:27354378). Transiently associates with phagosomes (By similarity). Localizes to the endoplasmic reticulum at domains of new tubule growth (By similarity) {ECO:0000250|UniProtKB:P24409, ECO:0000250|UniProtKB:P61026, ECO:0000269|PubMed:20576682, ECO:0000269|PubMed:27354378}

Tissue Location

Expressed in the brain, specifically neurons (at protein level).

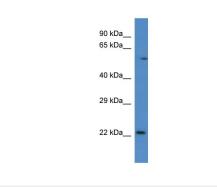
Rab10 antibody - C-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

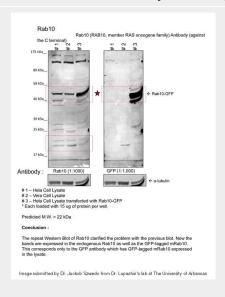
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Rab10 antibody - C-terminal region - Images





Rab1 antibody - C-terminal region (Al1191) validated by WB using Mouse Kidney lysate at 1µg/ml.



Sample Type: 1. Human Cervical Cancer cell lysate

(15ug)

2. Monkey Fibroblast cell lysate (15ug)

3. Human Cervical Cancer Cell transfected with mouse Rab1-GFP (15ug) **Primary Dilution:** 1:1

Secondary Antibody: goat anti-Rabbit

Secondary Dilution: 1:4,

Image

Submitted by: Dr. Jakob Szwedo, Dr. Lupashin's Lab

University of Arkansas for Medical Sciences

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