

RAB8A / RAB8 Antibody (C-Terminus)
Goat Polyclonal Antibody
Catalog # ALS16654**Specification**

RAB8A / RAB8 Antibody (C-Terminus) - Product Information

Application	WB, IHC-P, IF
Primary Accession	P61006
Other Accession	4218
Reactivity	Human, Mouse, Rat
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Calculated MW	23668
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200

RAB8A / RAB8 Antibody (C-Terminus) - Additional Information**Gene ID** 4218**Other Names**

RAB8A, RAB8, Ras-related protein rab-8, Oncogene c-mel, Ras-associated protein RAB8, Ras-related protein Rab-8A, MEL

Target/Specificity

Detects a band of 24 kDa by Western blot in the following human, rat and mouse whole cell lysates and transfected cells with GFP-Rab8a and GFP-Rab8b cds.

Reconstitution & Storage

PBS, 20% glycerol, 0.05% sodium azide. Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze-thaw cycles.

Precautions

RAB8A / RAB8 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

RAB8A / RAB8 Antibody (C-Terminus) - Protein Information**Name** RAB8A ([HGNC:7007](#))**Synonyms** MEL, RAB8**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 sets

of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. RAB8A is involved in polarized vesicular trafficking and neurotransmitter release. Together with RAB11A, RAB3IP, the exocyst complex, PARD3, PRKCI, ANXA2, CDC42 and DNMBP promotes transcytosis of PODXL to the apical membrane initiation sites (AMIS), apical surface formation and lumenogenesis (PubMed:20890297). Regulates the compacted morphology of the Golgi (PubMed:26209634). Together with MYO5B and RAB11A participates in epithelial cell polarization (PubMed:21282656). Also involved in membrane trafficking to the cilium and ciliogenesis (PubMed:21844891, PubMed:30398148, PubMed:20631154). Together with MICALL2, may also regulate adherens junction assembly (By similarity). May play a role in insulin-induced transport to the plasma membrane of the glucose transporter GLUT4 and therefore play a role in glucose homeostasis (By similarity). Involved in autophagy (PubMed:27103069). Participates in the export of a subset of neosynthesized proteins through a Rab8-Rab10- Rab11-dependent endosomal export route (PubMed:32344433). Targeted to and stabilized on stressed lysosomes through LRRK2 phosphorylation (PubMed:30209220). Suppresses stress-induced lysosomal enlargement through EHBP1 and EHNP1L1 effector proteins (PubMed:30209220).

Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus. Endosome membrane. Recycling endosome membrane. Cell projection, cilium. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:Q92930}; Lipid-anchor {ECO:0000250|UniProtKB:Q92930}; Cytoplasmic side {ECO:0000250|UniProtKB:Q92930}. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole {ECO:0000250|UniProtKB:P55258}. Cytoplasm, cytoskeleton, cilium basal body. Midbody. Cytoplasm, cytoskeleton, cilium axoneme. Cytoplasm Lysosome. Note=Colocalizes with OPTN at the Golgi complex and in vesicular structures close to the plasma membrane (PubMed:15837803). In the GDP-bound form, present in the perinuclear region (PubMed:12221131). Shows a polarized distribution to distal regions of cell protrusions in the GTP-bound form (PubMed:12221131). Colocalizes with PARD3, PRKCI, EXOC5, OCLN, PODXL and RAB11A in apical membrane initiation sites (AMIS) during the generation of apical surface and lumenogenesis (PubMed:20890297) Localizes to tubular recycling endosome (PubMed:19864458). Recruited to phagosomes containing S.aureus or M.tuberculosis (PubMed:21255211) Non-phosphorylated RAB8A predominantly localized to the cytoplasm whereas phosphorylated RAB8A localized to the membrane (PubMed:26824392, PubMed:29125462, PubMed:30398148). Colocalized with MICAL1, GRAF1/ARHGAP26 and GRAF2/ARHGAP10 on endosomal tubules (PubMed:32344433). Localizes to enlarged lysosomes through LRRK2 phosphorylation (PubMed:30209220). Colocalizes with RPGR at the primary cilia of epithelial cells (By similarity) {ECO:0000250|UniProtKB:P61007, ECO:0000269|PubMed:12221131, ECO:0000269|PubMed:15837803, ECO:0000269|PubMed:19864458, ECO:0000269|PubMed:20890297, ECO:0000269|PubMed:21255211, ECO:0000269|PubMed:26824392, ECO:0000269|PubMed:29125462, ECO:0000269|PubMed:30209220, ECO:0000269|PubMed:30398148, ECO:0000269|PubMed:32344433}

Volume

50 µl

RAB8A / RAB8 Antibody (C-Terminus) - Protocols

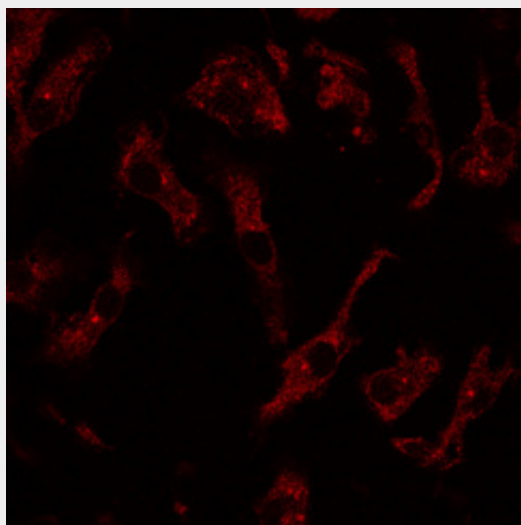
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

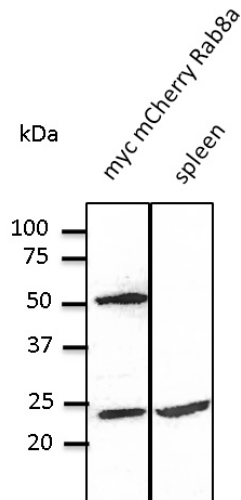
RAB8A / RAB8 Antibody (C-Terminus) - Images



Anti-RAB8A / RAB8 antibody IHC staining of human kidney.



Immunofluorescence - anti-Rab8 antibody at 1:100 dilution using primary macrophages.



Western blot.

RAB8A / RAB8 Antibody (C-Terminus) - Background

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 sets of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. That Rab is involved in polarized vesicular trafficking and neurotransmitter release. Together with RAB11A, RAB3IP, the exocyst complex, PARD3, PRKCI, ANXA2, CDC42 and DNMBP promotes transcytosis of PODXL to the apical membrane initiation sites (AMIS), apical surface formation and lumenogenesis. Together with MYO5B and RAB11A participates in epithelial cell polarization. Plays an important role in ciliogenesis. Together with MICALL2, may also regulate adherens junction assembly. May play a role in insulin-induced transport to the plasma membrane of the glucose transporter GLUT4 and therefore play a role in glucose homeostasis.

RAB8A / RAB8 Antibody (C-Terminus) - References

- Zahraoui A., et al. *J. Cell Biol.* 124:101-115(1994).
Nimmo E.R., et al. *Oncogene* 6:1347-1351(1991).
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).