

Rab8A Rabbit mAb

Catalog # AP74831

Product Information

Application	WB, IHC-P, IHC-F, ICC
Primary Accession	<u>P61006</u>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	23668

Additional Information

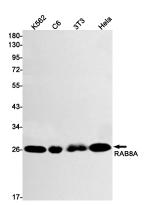
Gene ID	4218
Other Names	RAB8A
Dilution	WB~~1/500-1/1000 IHC-P~~N/A IHC-F~~N/A ICC~~N/A
Format	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40%Glycerol, 0.01% sodium azide and 0.05% BSA.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.

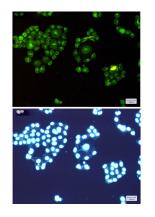
Protein Information

Name	RAB8A (<u>HGNC:7007</u>)
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: <u>27103069</u>). Participates in the export of a subset of neosynthesized proteins through a Rab8-Rab10- Rab11-dependent endososomal export route (PubMed: <u>32344433</u>). Targeted to and stabilized on stressed lysosomes through LRRK2 phosphorylation (PubMed: <u>30209220</u>). Suppresses stress-induced lysosomal enlargement through EHBP1 and EHNP1L1 effector proteins (PubMed: <u>30209220</u>).
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}; 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:2125521) 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:0000269 PubMed:15837803, ECO:0000269 PubMed:12251131, ECO:0000269 PubMed:26824392, ECO:0000269 PubMed:1225211, ECO:0000269 PubMed:26824392, ECO:0000269 PubMed:21255211, ECO:0000269 PubMed:26824392, ECO:0000269 PubMed:21255211, ECO:0000269 PubMed:26824392, ECO:0000269 PubMed:21255211, ECO:0000269 PubMed:30209220, ECO:0000269 PubMed:30398148, ECO:0000269 PubMed:30209220, ECO:0000269 PubMed:30398148, ECO:0000269 PubMed:32344433}

Images







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