

# Rab10 Rabbit mAb

Catalog # AP75983

## Product Information

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Application	WB, IP, ICC
Primary Accession	<a href="#">P61026</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	22541

## Additional Information

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Gene ID	10890
Other Names	RAB10
Dilution	WB~~1/500-1/1000 IP~~N/A ICC~~N/A
Format	Liquid

## Protein Information

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Name	RAB10 ( <a href="#">HGNC:9759</a> )
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Function	<p>The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed:<a href="#">21248164</a>). 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:<a href="#">21248164</a>). That Rab is mainly involved in the biosynthetic transport of proteins from the Golgi to the plasma membrane (PubMed:<a href="#">21248164</a>). Regulates, for instance, SLC2A4/GLUT4 glucose transporter-enriched vesicles delivery to the plasma membrane (By similarity). 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 (By similarity). Also plays a specific role in asymmetric protein transport to the plasma membrane (PubMed:<a href="#">16641372</a>). 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 (PubMed:<a href="#">16641372</a>). 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 (PubMed:<a href="#">23263280</a>). Together with LRRK2, RAB8A, and RILPL1, it regulates ciliogenesis (PubMed:<a href="#">30398148</a>). When phosphorylated by LRRK2 on Thr-73, binds RILPL1 and inhibits</p>
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ciliogenesis (PubMed:[30398148](#)). 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 where it promotes the extracellular release of lysosomal content through EHBP1 and EHNP1L1 effector proteins (PubMed:[30209220](#)).

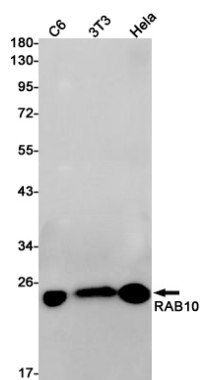
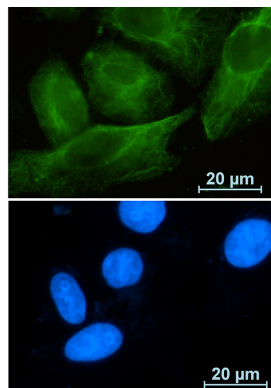
## Cellular Location

Cytoplasmic vesicle membrane; Lipid-anchor; Cytoplasmic side. Golgi apparatus membrane. Golgi apparatus, trans-Golgi network membrane {ECO:0000250|UniProtKB:P24409}. Endosome membrane 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. Lysosome. Note=Associates with SLC2A4/GLUT4 storage vesicles (PubMed:22908308). Localizes to the base of the cilium when phosphorylated by LRRK2 on Thr-73 (PubMed:20576682, PubMed:30398148). Transiently associates with phagosomes (By similarity). Localizes to the endoplasmic reticulum at domains of new tubule growth (PubMed:23263280). Colocalizes with MICAL1, GRAF1/ARHGAP26 and GRAF2/ARHGAP10 on endosomal tubules (PubMed:32344433). Localizes to enlarged lysosomes through LRRK2 phosphorylation (PubMed:30209220). {ECO:0000250|UniProtKB:P24409, ECO:0000269|PubMed:20576682, ECO:0000269|PubMed:22908308, ECO:0000269|PubMed:23263280, ECO:0000269|PubMed:30209220, ECO:0000269|PubMed:30398148, ECO:0000269|PubMed:32344433}

## Tissue Location

Expressed in the hippocampus (PubMed:29562525). Expressed in neutrophils (at protein level) (PubMed:29127255) Expressed in the testis (at protein level) (PubMed:28067790)

## Images



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