

**Anti-RAB7A / RAB7 Antibody (C-Terminus)**  
**Goat Anti Mouse Polyclonal Antibody**  
**Catalog # ALS17334****Specification**

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**Anti-RAB7A / RAB7 Antibody (C-Terminus) - Product Information**

Application	WB, IHC-P, IF
Primary Accession	<a href="#">P51149</a>
Predicted	Human, Mouse, Rat, Monkey, Dog
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Calculated MW	23490
Dilution	WB~~1:1000 IHC-P~~N/A IF~~1:50~200

**Anti-RAB7A / RAB7 Antibody (C-Terminus) - Additional Information****Gene ID 7879**

Alias Symbol	<b>RAB7A</b>
<b>Other Names</b>	RAB7A, CMT2B, PRO2706, RAB7, Ras-associated protein RAB7, Ras-related protein Rab-7a, PSN

**Target/Specificity**

Detects Rab7a protein in the human, rat and mouse whole cell lysates and transfected cells with GFP-Rab7a by Western blot. This Ab is specific for Rab7a.

**Reconstitution & Storage**

PBS, 20% glycerol, 0.05% sodium azide. Long term: -20°C; Short term: +4°C; Avoid freeze-thaw cycles.

**Precautions**

Anti-RAB7A / RAB7 Antibody (C-Terminus) is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-RAB7A / RAB7 Antibody (C-Terminus) - Protein Information**

**Name** RAB7A ([HGNC:9788](#))

**Synonyms** RAB7

**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

(PubMed:<a href="http://www.uniprot.org/citations/38538795" target="\_blank">38538795</a>). In its active state, RAB7A binds to a variety of effector proteins playing a key role in the regulation of endo-lysosomal trafficking. Governs early-to-late endosomal maturation, microtubule minus-end as well as plus-end directed endosomal migration and positioning, and endosome- lysosome transport through different protein-protein interaction cascades. Also plays a central role in growth-factor-mediated cell signaling, nutrient-transporter mediated nutrient uptake, neurotrophin transport in the axons of neurons and lipid metabolism. Also involved in regulation of some specialized endosomal membrane trafficking, such as maturation of melanosomes, pathogen-induced phagosomes (or vacuoles) and autophagosomes. Plays a role in the maturation and acidification of phagosomes that engulf pathogens, such as S.aureus and M.tuberculosis. Plays a role in the fusion of phagosomes with lysosomes. In concert with RAC1, plays a role in regulating the formation of RBs (ruffled borders) in osteoclasts. Controls the endosomal trafficking and neurite outgrowth signaling of NTRK1/TRKA (PubMed:<a href="http://www.uniprot.org/citations/11179213" target="\_blank">11179213</a>, PubMed:<a href="http://www.uniprot.org/citations/12944476" target="\_blank">12944476</a>, PubMed:<a href="http://www.uniprot.org/citations/14617358" target="\_blank">14617358</a>, PubMed:<a href="http://www.uniprot.org/citations/20028791" target="\_blank">20028791</a>, PubMed:<a href="http://www.uniprot.org/citations/21255211" target="\_blank">21255211</a>). Regulates the endocytic trafficking of the EGF-EGFR complex by regulating its lysosomal degradation. Involved in the ADRB2-stimulated lipolysis through lipophagy, a cytosolic lipase-independent autophagic pathway (By similarity). Required for the exosomal release of SDCBP, CD63 and syndecan (PubMed:<a href="http://www.uniprot.org/citations/22660413" target="\_blank">22660413</a>). Required for vesicular trafficking and cell surface expression of ACE2 (PubMed:<a href="http://www.uniprot.org/citations/33147445" target="\_blank">33147445</a>). May play a role in PRPH neuronal intermediate filament assembly (By similarity).

#### Cellular Location

Cytoplasmic vesicle, phagosome membrane; Peripheral membrane protein; Cytoplasmic side. Late endosome membrane; Peripheral membrane protein; Cytoplasmic side Lysosome membrane; Peripheral membrane protein; Cytoplasmic side Melanosome membrane; Peripheral membrane protein; Cytoplasmic side. Cytoplasmic vesicle, autophagosome membrane; Peripheral membrane protein; Cytoplasmic side. Lipid droplet {ECO:0000250|UniProtKB:P51150}. Endosome membrane; Peripheral membrane protein. Cytoplasmic vesicle {ECO:0000250|UniProtKB:P51150} Mitochondrion membrane; Peripheral membrane protein. Note=Colocalizes with OSBPL1A at the late endosome (PubMed:16176980). Found in the ruffled border (a late endosomal-like compartment in the plasma membrane) of bone-resorbing osteoclasts. Recruited to phagosomes containing S.aureus or Mycobacterium (PubMed:21255211). Lipid droplet localization is increased upon ADRB2 stimulation (By similarity). Recruited to damaged mitochondria during mitophagy in a RIMOC1-dependent manner (PubMed:34432599). {ECO:0000250|UniProtKB:P51150, ECO:0000269|PubMed:16176980, ECO:0000269|PubMed:21255211, ECO:0000269|PubMed:34432599}

#### Tissue Location

Widely expressed; high expression found in skeletal muscle.

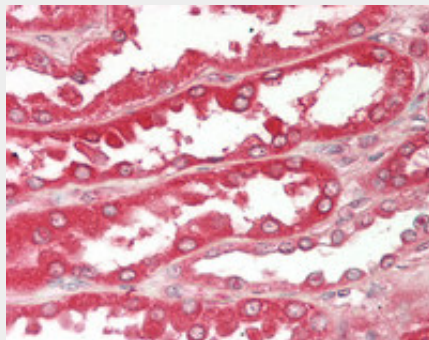
#### Anti-RAB7A / RAB7 Antibody (C-Terminus) - Protocols

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

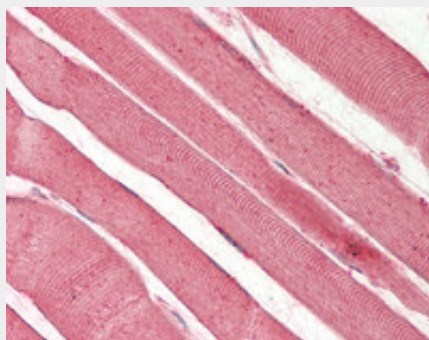
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **Anti-RAB7A / RAB7 Antibody (C-Terminus) - Images**



Human Kidney: Formalin-Fixed, Paraffin-Embedded (FFPE)



Human Skeletal Muscle: Formalin-Fixed, Paraffin-Embedded (FFPE)