

Rabbit RAB7A Polyclonal Antibody | anti-RAB7A antibody

RAB7A Antibody

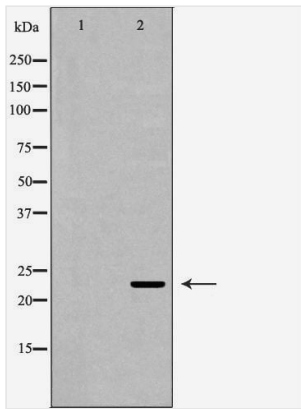
CATALOG # AAA326067	HOST Rabbit	REACTIVITY Human, Mouse, Rat	APPLICATIONS ELISA, Immunohistochemistry, Western Blot
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PRODUCT SYNONYMS

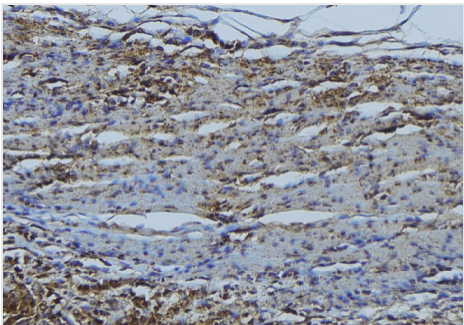
RAB7A; Polyclonal Antibody; RAB7A Antibody; CMT2B; PRO2706; PSN; RAB7; member RAS oncogene family; RAB7A_HUMAN; Ras associated protein RAB7; Ras related protein Rab7; Ras related protein Rab7a; Ras-related protein Rab-7a; anti-RAB7A antibody

PRODUCT SPECIFICATIONS

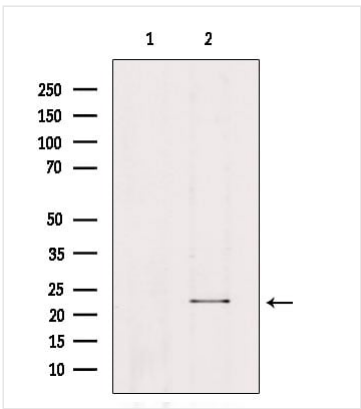
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	IgG
Specificity	RAB7A antibody detects endogenous levels of total RAB7A
Purity/Purification	The antiserum was purified by peptide affinity chromatography using SulfoLink Coupling Resin.
Form/Format	Liquid Phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Sequence Length	207
Applicable Applications for anti-RAB7A antibody	ELISA, IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human RAB7A
Subcellular Location	Late endosome. Lysosome. Cytoplasmic Vesicle > Phagosome. Melanosome. Cytoplasmic Vesicle > Phagosome Membrane. Co-localizes with OSBPL1A at the late endosome. 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.
Tissue Specificity	Widely expressed; high expression found in skeletal muscle.
Predicted Cross Reactivity	Pig, Zebrafish, Bovine, Horse, Sheep, Rabbit, Dog, Chicken, Xenopus
Similarity	Pig (100%), Zebrafish (100%), Bovine (92%), Horse (100%), Sheep (100%), Rabbit (100%), Dog (100%), Chicken (100%), Xenopus (100%)
Conjugation	Unconjugated
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.



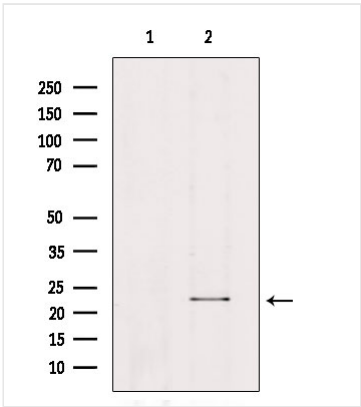
WB (Western Blot)
Western blot analysis of K562 lysate using RAB7A antibody. The lane on the left is treated with the antigen-specific peptide.



IHC (Immunohistochemistry)
AAA326067 at 1/100 staining Mouse muscle tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the antibody for 1.5 hours at 22 degree C. An HRP conjugated goat anti-rabbit antibody was used as the secondary.



WB (Western Blot)
Western blot analysis of extracts from rat brain, using RAB7A Antibody.



WB (Western Blot)
Western blot analysis of extracts from HeLa, using RAB7A Antibody. Lane 1 was treated with the antigen-specific peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-RAB7A antibody	Description: Rab7 and Rab9 are members of the Ras superfamily of small RabGTPases (1). Both proteins are located in late endosomes, but exert different functions. Rab7 associates with the RIPL effector protein to control membrane trafficking from early to late endosome and to lysosomes (2, 3). Rab7 also helps to regulate growth receptor endocytic trafficking and degradation (3, 4), and maturation of phagosome and autophagic vacuoles (4-6). Rab9 interacts with its effector proteins p40 and TIP47 (7, 8) to promote the MPR (mannose 6-phosphate receptor)-associated lysosomal enzyme transport between late endosomes and the trans Golgi network (9, 10). Function: Key regulator in 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. Plays a central role, not only in endosomal traffic, but also in many other cellular and physiological events, such as 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. Plays important roles in microbial pathogen infection and survival, as well as in participating in the life cycle of viruses. Microbial pathogens possess survival strategies governed by RAB7A, sometimes by employing RAB7A function (e.g. Salmonella) and sometimes by excluding RAB7A function (e.g. Mycobacterium). 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:11179213, PubMed:12944476, PubMed:14617358, PubMed:20028791, PubMed:21255211). 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:22660413). Subunit Structure: The GTP-bound form interacts with RAC1 (By similarity). Interacts with NTRK1/TRKA (By similarity). Interacts with C9orf72 (By similarity). Interacts with CHM, the substrate-binding subunit of the Rab geranylgeranyltransferase complex (By similarity). Interacts with RILP (PubMed:11179213, PubMed:14668488, PubMed:15933719, PubMed:20028791, PubMed:22431521). Interacts with PSMA7 (PubMed:14998988). Interacts with RNF115 (PubMed:16925951). Interacts with FYCO1 (PubMed:20100911). Interacts with the PIK3C3/VPS34-PIK3R4 complex (PubMed:14617358). The GTP-bound form interacts with OSBPL1A (PubMed:16176980). Interacts with CLN3 (PubMed:22261744). Does not interact with HPS4 and the BLOC-3 complex (heterodimer of HPS1 and HPS4) (PubMed:20048159). Interacts with CLN5 (PubMed:22431521). Interacts with PLEKHM1 (via N- and C-terminus) (By similarity). Similarity: Belongs to the small GTPase superfamily. Rab family.
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NCBI AND UNIPROT INFORMATION

NCBI GI #	34147513
NCBI GeneID	7879
NCBI Accession #	NP_004628.4
NCBI GenBank Nucleotide #	NM_004637.5
UniProt Accession #	P51149; Q9NWJ0; Q9UPB0; A8K3V6
Molecular Weight	Observed: 23 kDa Predicted: 24 kDa
NCBI Official Full Name	ras-related protein Rab-7a
NCBI Official Synonym Full Names	RAB7A, member RAS oncogene family
NCBI Official Symbol	RAB7A
NCBI Official Synonym Symbols	RAB7; PRO2706
NCBI Protein Information	ras-related protein Rab-7a
UniProt Protein Name	Ras-related protein Rab-7a
UniProt Gene Name	RAB7A
UniProt Synonym Gene Names	RAB7

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: <https://www.aaabiotech.com/polyclonal/rab7a-antibody-immunohistochemistry-western-blot-elisa/326067>