

Anti-RAB5A / RAB5 Antibody

Rabbit Anti Human Polyclonal Antibody
Catalog # ALS18322

Product Information

Application	WB, IHC-P, IF
Primary Accession	P20339
Predicted	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	23659

Additional Information

Gene ID	5868
Alias Symbol	RAB5A
Other Names	RAB5A, Ras-related protein Rab-5A, RAS-associated protein RAB5A, RAB5
Target/Specificity	Human RAB5A / RAB5
Reconstitution & Storage	Affinity purified
Precautions	Anti-RAB5A / RAB5 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAB5A (HGNC:9783)
Synonyms	RAB5
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. RAB5A is required for the fusion of plasma membranes and early endosomes and involved in early endocytic trafficking (PubMed: 10818110 , PubMed: 14617813 , PubMed: 15378032 , PubMed: 16086013 , PubMed: 16410077 , PubMed: 17562788). Required for EEA1 recruitment to early endosomes (PubMed: 16086013 , PubMed: 17562788). Recruits FERRY complex to early endosomes, where FERRY links early endosomes with a subgroup of mRNAs to enable mRNA intracellular distribution (PubMed: 37267906). Recruits RABEP1/Rabaptin- 5

effector to early endosomes, thereby promoting endocytic membrane fusion (By similarity). Required for EGF and transferrin endocytosis and trafficking through early endosomes (PubMed:[16086013](#), PubMed:[17562788](#)). Contributes to the regulation of filopodia extension (PubMed:[14978216](#)). Required for the exosomal release of SDCBP, CD63, PDCD6IP and syndecan (PubMed:[22660413](#)). Regulates maturation of apoptotic cell-containing phagosomes, probably downstream of DYN2 and PIK3C3 (By similarity).

Cellular Location

Cell membrane; Lipid-anchor; Cytoplasmic side. Early endosome membrane; Lipid-anchor. Melanosome Cytoplasmic vesicle. Cell projection, ruffle {ECO:0000250|UniProtKB:P18066}. Membrane. Cytoplasm, cytosol. Cytoplasmic vesicle, phagosome membrane {ECO:0000250|UniProtKB:Q9CQD1}. Endosome membrane Note=Enriched in stage I melanosomes (PubMed:17081065). Alternates between membrane-bound and cytosolic forms (Probable) {ECO:0000269|PubMed:17081065, ECO:0000305}

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