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Rab 5A Polyclonal Antibody

Catalog # AP73639

Product Information

Application	WB, IHC-P, IF, ICC, E
Primary Accession	P20339
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23659

Additional Information

Gene ID	5868
Other Names	RAB5A; RAB5; Ras-related protein Rab-5A
Dilution	WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications. IHC-P~~Western Blot: 1/500 - 1/2000. IHC-p: 1/100-1/300. ELISA: 1/20000. Not yet tested in other applications. IF~~1:50~200 ICC~~N/A E~~N/A
Format	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.
Storage Conditions	-20℃

Protein Information

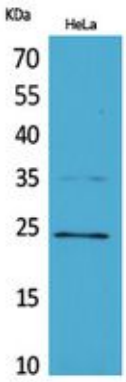
Name	RAB5A (HGNC:9783)
Synonyms	RAB5
Function	The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes. Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to 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}

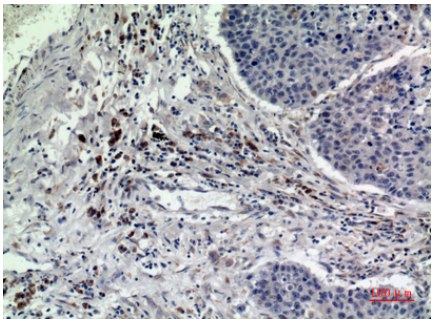
Background

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 (PubMed:10818110, PubMed:14617813, PubMed:16410077, PubMed:15378032). 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).

Images

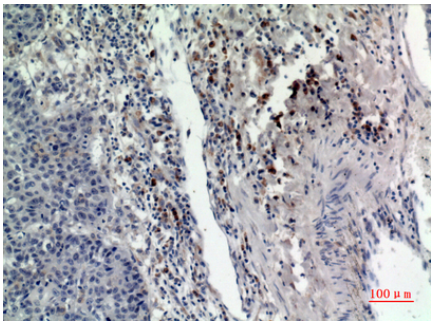


Western Blot analysis of HeLa cells using Rab 5A Polyclonal Antibody.. Secondary antibody was diluted at 1:20000



Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100

Immunohistochemical analysis of paraffin-embedded human-lung, antibody was diluted at 1:100



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