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Rab5a antibody - C-terminal region

Rabbit Polyclonal Antibody
Catalog # AI14626

Product Information

Application	WB
Primary Accession	Q9CQD1
Other Accession	NM_025887, NP_080163
Reactivity	Human, Mouse, Rat, Rabbit, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted	Human, Mouse, Rat, Pig, Chicken, Dog, Guinea Pig, Bovine, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23599

Additional Information

Gene ID	271457
Alias Symbol	2410015H04Rik, AI663973, AU021172
Other Names	Ras-related protein Rab-5A, Rab5a, nnyRab5a
Format	Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.
Reconstitution & Storage	Add 50 ul of distilled water. Final anti-Rab5a antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.
Precautions	Rab5a antibody - C-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	Rab5a {ECO:0000312|MGI:MGI:105926}
Synonyms	nnyRab5a
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:18425118). Required for EEA1 recruitment to early endosomes. Recruits FERRY complex to early endosomes, where FERRY links early

endosomes with a subgroup of mRNAs to enable mRNA intracellular distribution (By similarity). 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. Contributes to the regulation of filopodia extension. Required for the exosomal release of SDCBP, CD63, PDCD6IP and syndecan (By similarity). Regulates maturation of apoptotic cell-containing phagosomes, probably downstream of DYN2 and PIK3C3 (By similarity) (PubMed:18425118).

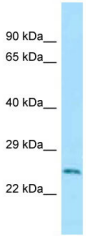
Cellular Location

Cell membrane {ECO:0000250|UniProtKB:P20339}; Lipid-anchor {ECO:0000250|UniProtKB:P20339}; Cytoplasmic side {ECO:0000250|UniProtKB:P18066}. Early endosome membrane {ECO:0000250|UniProtKB:P20339}; Lipid-anchor {ECO:0000250|UniProtKB:P20339}. Melanosome. Cytoplasmic vesicle {ECO:0000250|UniProtKB:P20339}. Cell projection, ruffle {ECO:0000250|UniProtKB:P18066}. Membrane {ECO:0000250|UniProtKB:P20339}. Cytoplasm, cytosol {ECO:0000250|UniProtKB:P20339}. Cytoplasmic vesicle, phagosome membrane. Endosome membrane {ECO:0000250|UniProtKB:P20339}. Note=Enriched in stage I melanosomes Alternates between membrane-bound and cytosolic forms {ECO:0000250|UniProtKB:P20339}

References

Kuroda T.S.,et al.J. Biol. Chem. 277:9212-9218(2002).
Itoh T.,et al.Genes Cells 11:1023-1037(2006).
Carninci P.,et al.Science 309:1559-1563(2005).
Mural R.J.,et al.Submitted (JUL-2005) to the EMBL/GenBank/DDBJ databases.
Lubec G.,et al.Submitted (APR-2007) to UniProtKB.

Images



WB Suggested Anti-Rab5a Antibody Titration: 1.0 µg/ml
Positive Control: Mouse Small Intestine

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