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RAB35 Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AW5404

Product Information

Application	IHC-P, WB
Primary Accession	Q15286
Other Accession	Q5U316, Q6PHN9
Reactivity	Human, Mouse
Predicted	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23025
Isotype	Rabbit IgG
Antigen Source	HUMAN

Additional Information

Gene ID	11021
Antigen Region	166-199
Other Names	Ras-related protein Rab-35, GTP-binding protein RAY, Ras-related protein Rab-1C, RAB35, RAB1C, RAY
Dilution	IHC-P~~1:100~500 WB~~1:1000
Target/Specificity	This RAB35 antibody is generated from a rabbit immunized with a KLH conjugated synthetic peptide between 166-199 amino acids from the C-terminal region of human RAB35.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	RAB35 Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	RAB35 (HGNC:9774)
Synonyms	RAB1C, RAY

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:30905672). RAB35 is involved in the process of endocytosis and is an essential rate- limiting regulator of the fast recycling pathway back to the plasma membrane (PubMed:21951725). During cytokinesis, required for the postfurrowing terminal steps, namely for intercellular bridge stability and abscission, possibly by controlling phosphatidylinositol 4,5-bis phosphate (PIP2) and SEPT2 localization at the intercellular bridge (PubMed:16950109). May indirectly regulate neurite outgrowth. Together with TBC1D13 may be involved in regulation of insulin-induced glucose transporter SLC2A4/GLUT4 translocation to the plasma membrane in adipocytes (By similarity).
Cellular Location	Cell membrane; Lipid-anchor; Cytoplasmic side. Membrane, clathrin- coated pit. Cytoplasmic vesicle, clathrin-coated vesicle. Endosome. Melanosome. Note=Present on sorting endosomes and recycling endosome tubules (PubMed:16950109). Tends to be enriched in PIP2-positive cell membrane domains (PubMed:16950109). During mitosis, associated with the plasma membrane and present at the ingressing furrow during early cytokinesis as well as at the intercellular bridge later during cytokinesis (PubMed:16950109). Identified in stage I to stage IV melanosomes (PubMed:17081065). Colocalizes with ACAP2 and RUSC2 at the membrane protrusions of HEK293T cells (PubMed:30905672)

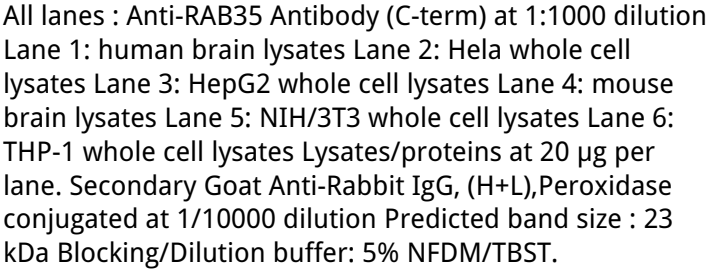
Background

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. That Rab is involved in the process of endocytosis and is an essential rate-limiting regulator of the fast recycling pathway back to the plasma membrane. During cytokinesis, required for the postfurrowing terminal steps, namely for intercellular bridge stability and abscission, possibly by controlling phosphatidylinositol 4,5-bis phosphate (PIP2) and SEPT2 localization at the intercellular bridge. May indirectly regulate neurite outgrowth.

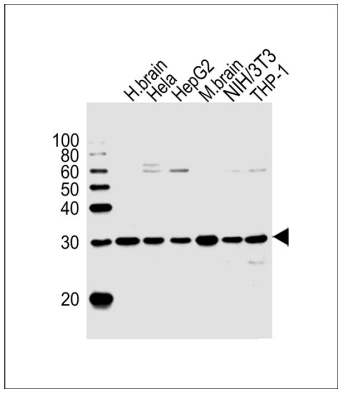
References

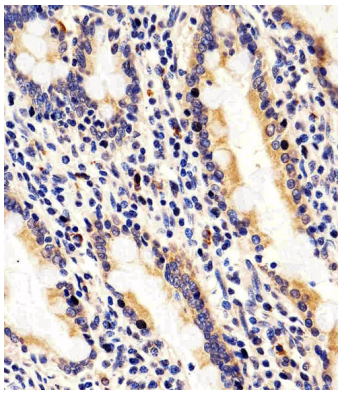
Zhu A.X.,et al.Biochem. Biophys. Res. Commun. 205:1875-1882(1994).
Puhl H.L. III,et al.Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.
Kalnine N.,et al.Submitted (OCT-2004) to the EMBL/GenBank/DDBJ databases.
Halleck A.,et al.Submitted (JUN-2004) to the EMBL/GenBank/DDBJ databases.
Ota T.,et al.Nat. Genet. 36:40-45(2004).

Images



All lanes : Anti-RAB35 Antibody (C-term) at 1:1000 dilution Lane 1: human brain lysates Lane 2: Hela whole cell lysates Lane 3: HepG2 whole cell lysates Lane 4: mouse brain lysates Lane 5: NIH/3T3 whole cell lysates Lane 6: THP-1 whole cell lysates Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L),Peroxidase conjugated at 1/10000 dilution Predicted band size : 23 kDa Blocking/Dilution buffer: 5% NFDM/TBST.





Immunohistochemical analysis of paraffin-embedded H.small intestine section using RAB35 Antibody (C-term)(Cat#AW5404). AW5404 was diluted at 1:25 dilution. A peroxidase-conjugated goat anti-rabbit IgG at 1:400 dilution was used as the secondary antibody, followed by DAB staining.