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RAB13 Antibody (Center)

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP6667c

Specification

RAB13 Antibody (Center) - Product Information

Application	**WB, IHC-P, FC,E**
Primary Accession	P51153
Other Accession	Q58DS5
Reactivity	**Human, Mouse**
Predicted	**Bovine**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit Ig**
Calculated MW	**22774**
Antigen Region	**109-137**

RAB13 Antibody (Center) - Additional Information

Gene ID 5872

Other Names
Ras-related protein Rab-13, Cell growth-inhibiting gene 4 protein, RAB13

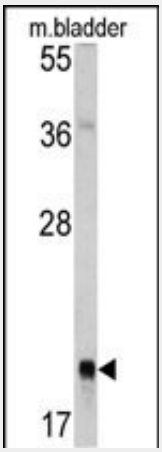
Target/Specificity
This RAB13 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 109-137 amino acids from the Central region of human RAB13.

Dilution
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

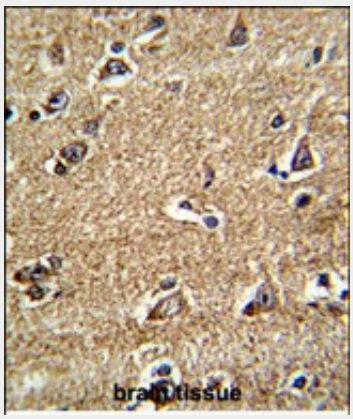
Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

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



Western blot analysis of RAB13 antibody (Center) (Cat. #AP6667c) in mouse bladder tissue lysates (35ug/lane). RAB13 (arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human brain tissue reacted with RAB13 Antibody (Center), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

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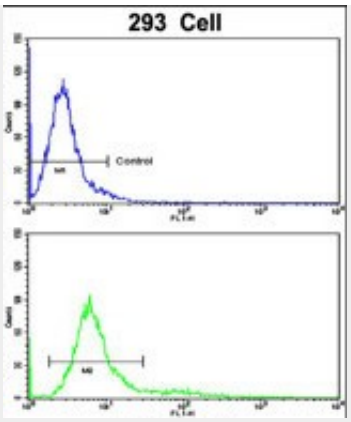
RAB13 Antibody (Center) is for research use only and not for use in diagnostic or therapeutic procedures.

RAB13 Antibody (Center) - Protein Information

Name RAB13

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. That Rab is involved in endocytic recycling and regulates the transport to the plasma membrane of transmembrane proteins like the tight junction protein OCLN/occludin. Thereby, it regulates the assembly and the activity of tight junctions. Moreover, it may also regulate tight junction assembly by activating the PKA signaling pathway and by reorganizing the actin cytoskeleton through the activation of the downstream effectors PRKACA and MICALL2 respectively. Through its role in tight junction assembly, may play a role in the establishment of Sertoli cell barrier. Plays also a role in angiogenesis through regulation of endothelial cells chemotaxis. Also involved in neurite outgrowth. Has also been proposed to play a role in post-Golgi membrane trafficking from the TGN to the recycling endosome. Finally, it has been involved in insulin-induced transport to the plasma membrane of the glucose transporter GLUT4 and therefore may play a role in glucose homeostasis.

Cellular Location
Cell membrane; Lipid-anchor; Cytoplasmic side. Cytoplasmic vesicle membrane; Lipid-anchor; Cytoplasmic side. Cell junction, tight junction. Golgi apparatus, trans-Golgi network membrane Recycling endosome membrane. Cell projection, lamellipodium {ECO:0000250|UniProtKB:Q9DD03}. Note=Tight junctions or associated with vesicles scattered throughout the cytoplasm in cells lacking tight junctions



Flow cytometric analysis of 293 cells using RAB13 Antibody (Center)(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

RAB13 Antibody (Center) - Background

RAB13 can participate in polarized transport, in the assembly and/or the activity of tight junctions.

RAB13 Antibody (Center) - References

Nokes,R.L., J. Cell Biol. 182 (5), 845-853 (2008)
Kanda,I., Oncogene 27 (12), 1687-1695 (2008)

(PubMed:8294494) Relocalizes to the leading edge of lamellipodia in migrating endothelial cells (By similarity). {ECO:0000250|UniProtKB:Q9DD03, ECO:0000269|PubMed:8294494}

Tissue Location
Detected in several types of epithelia, including intestine, kidney, liver and in endothelial cells

RAB13 Antibody (Center) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture