

RAB13 Antibody (Center)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6667c**Specification**

RAB13 Antibody (Center) - Product Information

Application	FC, IHC-P, WB,E
Primary Accession	P51153
Other Accession	Q58DS5
Reactivity	Human, Mouse
Predicted	Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
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

FC~~1:10~50

IHC-P~~1:50~100

WB~~1:1000

E~~Use at an assay dependent concentration.

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

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

RAB13 Antibody (Center) - Protein Information

Name RAB13 ([HGNC:9762](#))

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. RAB13 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 (PubMed:8294494) Relocalizes to the leading edge of lamellipodia in migrating endothelial cells (By similarity). {ECO:0000250|UniProtKB:Q9DD03, ECO:0000269|PubMed:8294494}

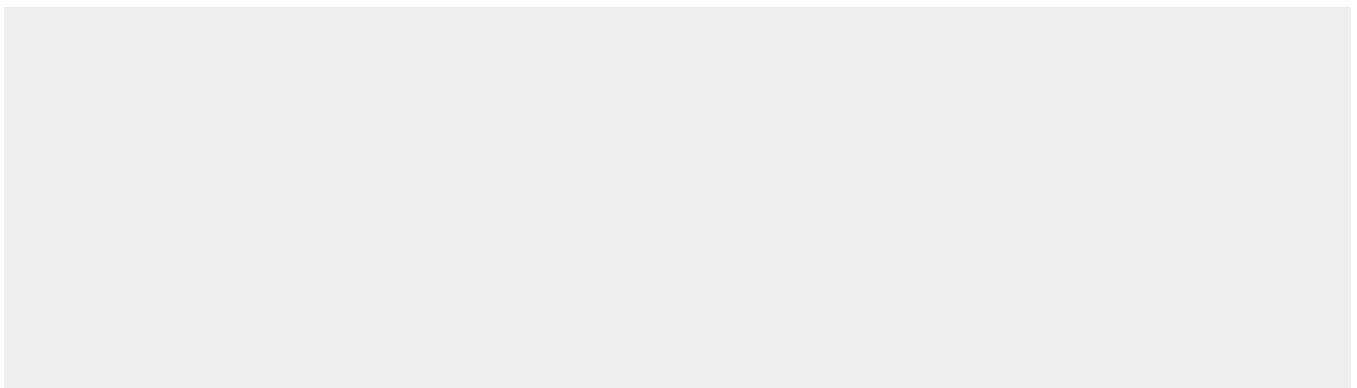
Tissue Location

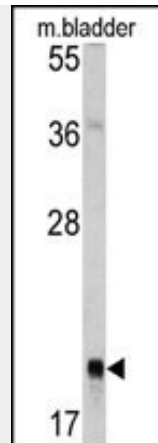
Detected in several types of epithelia, including intestine, kidney, liver and in endothelial cells

RAB13 Antibody (Center) - Protocols

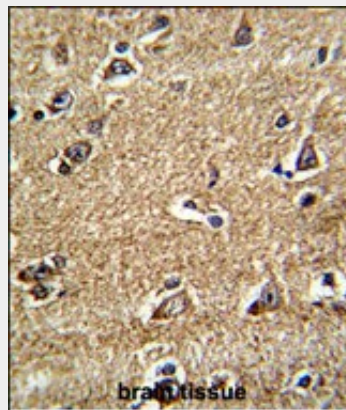
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

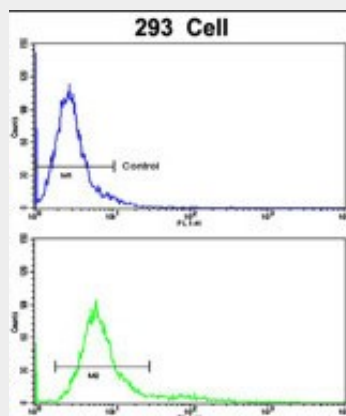
RAB13 Antibody (Center) - Images



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.



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)