

Anti-RAB13 Picoband Antibody

Catalog # ABO12476

Product Information

Application	WB, IHC-P
Primary Accession	P51153
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Ras-related protein Rab-13(RAB13) detection. Tested with WB, IHC-P in Human;Mouse;Rat.
Reconstitution	Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	5872
Other Names	Ras-related protein Rab-13, Cell growth-inhibiting gene 4 protein, RAB13
Calculated MW	22774
Application Details	Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Mouse, Rat, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Human, Rat
Subcellular Localization	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 . 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). .
Tissue Specificity	Detected in several types of epithelia, including intestine, kidney, liver and in endothelial cells.
Source	Eukaryota
Protein Name	Ras-related protein Rab-13
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human RAB13 (121-150aa NKCDMEAKRKVQKEQADKLAREHGIRFFET), different from

the related mouse and rat sequences by four amino acids.

Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins.
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.

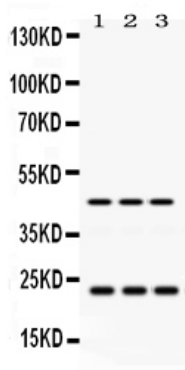
Protein Information

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

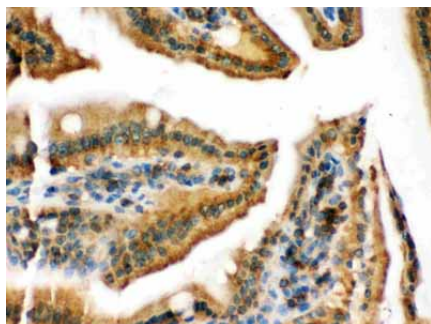
Background

Ras-related protein Rab-13 is a protein that in humans is encoded by the RAB13 gene. This gene is a member of the Rab family of small G proteins and plays a role in regulating membrane trafficking between trans-Golgi network (TGN) and recycling endosomes (RE). The encoded protein is involved in the assembly of tight junctions, which are components of the apical junctional complex (AJC) of epithelial cells. The AJC plays a role in forming a barrier between luminal contents and the underlying tissue. Additional functions associated with the protein include endocytic recycling of occludin, regulation of epithelial cell scattering, neuronal regeneration and regulation of neurite outgrowth. Alternately spliced transcript variants have been observed for this gene. A pseudogene associated with this gene is located on chromosome 12.

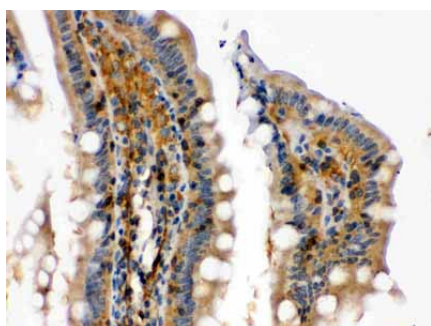
Images



Anti- RAB13 Picoband antibody, ABO12476, Western blotting
 All lanes: Anti RAB13 (ABO12476) at 0.5ug/ml
 Lane 1: Rat Kidney Tissue Lysate at 50ug
 Lane 2: HELA Whole Cell Lysate at 40ug
 Lane 3: HEPG2 Whole Cell Lysate at 40ug
 Predicted bind size: 23KD, 45K
 Observed bind size: 23KD, 45KD



Anti- RAB13 Picoband antibody, ABO12476, IHC(P)
 IHC(P): Mouse Intestine Tissue



Anti- RAB13 Picoband antibody, ABO12476, IHC(P)
 IHC(P): Rat Intestine Tissue

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