

Anti-RAB13 antibody



Description Unconjugated Rabbit polyclonal to RAB13

Model STJ191269

Host Rabbit

Reactivity Human, Mouse, Rat

Applications ELISA, WB

Immunogen Synthesized peptide derived from human RAB13 protein.

Immunogen Region 40-120aa

Gene ID <u>5872</u>

Gene Symbol RAB13

Dilution range WB 1:500-2000 ELISA 1:5000-20000

Specificity RAB13 Polyclonal Antibody detects endogenous levels of protein.

Tissue Specificity Detected in several types of epithelia, including intestine, kidney, liver and in

endothelial cells.

Purification RAB13 antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Note For Research Use Only (RUO).

Protein Name Ras-related protein Rab-13 Cell growth-inhibiting gene 4 protein

Molecular Weight 22 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation Liquid form in PBS containing 50% glycerol, and 0.02% sodium azide.

Concentration 1 mg/ml

Storage Instruction Store at -20°C, and avoid repeat freeze-thaw cycles.

Database Links <u>HGNC:9762OMIM:602672</u>

Alternative Names Ras-related protein Rab-13 Cell growth-inhibiting gene 4 protein

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 Localization Cell membrane Cytoplasmic vesicle membrane 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 . Relocalizes to the leading edge of lamellipodia in migrating endothelial cells .