



Rabbit Anti-RAB13 antibody

SL8736R

Product Name:	RAB13
Chinese Name:	G蛋白家族RAB13蛋白抗体
Alias:	Cell growth-inhibiting gene 4 protein; GIG4; Growth inhibiting gene 4 protein; RAB13; RAB13 member RAS oncogene family; RAB13_HUMAN; RAS associated protein RAB13; Ras related protein Rab13; Ras-related protein Rab-13.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Zebrafish,Sheep,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	23kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human RAB13:51-150/203
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	Preservative: 15mM Sodium Azide, Constituents: 1% BSA, 0.01M PBS, pH 7.4
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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.

Subunit:

Interacts (GTP-bound form) with MICALL2; competes with RAB8A and is involved in tight junctions assembly. Interacts (GTP-bound form) with MICALL1. Interacts with PRKACA; downstream effector of RAB13 involved in tight junction assembly. Interacts with GRB2; may recruit RAB13 to the leading edge of migrating endothelial cells where it can activate RHOA. Interacts (isoprenylated form) with PDE6D; dissociates RAB13 from membranes. Interacts with CCDC64B/BICDR2. Interacts with LEPROT and LEPROTL1.

Subcellular Location:

Cell junction > tight junction. Cell membrane. Cytoplasmic vesicle membrane. Cytoplasmic tight junctions or associated with vesicles scattered throughout the cytoplasm in cells lacking tight junctions.

Tissue Specificity:

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

Similarity:

Belongs to the small GTPase superfamily. Rab family.

SWISS:

P51153

Gene ID:

5872

Database links:

[Entrez Gene: 514541](#) Cow

[Entrez Gene: 5872](#) Human

[Entrez Gene: 68328](#) Mouse

[Entrez Gene: 81756](#) Rat

[Entrez Gene: 373105](#) Zebrafish

[Omim: 602672](#) Human

[SwissProt: Q58DS5](#) Cow

[SwissProt: P51153](#) Human

[SwissProt: Q5U0A6](#) Human

[SwissProt: Q9DD03](#) Mouse

[SwissProt: P35286](#) Rat

[SwissProt: Q7T3A4](#) Zebrafish

[Unigene: 151536](#) Human

[Unigene: 29355](#) Mouse

[Unigene: 9819](#) Rat

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.