

## Product datasheet

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# ARG58982 anti-RAB13 antibody

Package: 100 μl Store at: -20°C

### **Summary**

Product Description Rabbit Polyclonal antibody recognizes RAB13

Tested Reactivity Hu

Tested Application ICC/IF, WB

Host Rabbit

Clonality Polyclonal

Isotype IgG

Target Name RAB13
Species Human

**Immunogen** Recombinant fusion protein corresponding to aa. 1-203 of Human RAB13 (NP\_002861.1).

Conjugation Un-conjugated

Alternate Names Cell growth-inhibiting gene 4 protein; GIG4; Ras-related protein Rab-13

## **Application Instructions**

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	293T	
Observed Size	23 kDa	

## **Properties**

Form Liquid

Purification Affinity purified.

Buffer PBS (pH 7.3), 0.02% Sodium azide and 50% Glycerol.

Preservative 0.02% Sodium azide

Stabilizer 50% Glycerol

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

#### Bioinformation

Gene Symbol

RAB13

Gene Full Name

RAB13, member RAS oncogene family

Background

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. [provided by RefSeq, Jan 2013]

**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. [UniProt]

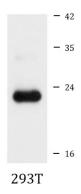
Calculated Mw

23 kDa

Cellular Localization

Cell membrane, Lipid-anchor, Cytoplasmic side, Cytoplasmic vesicle membrane, Cell junction, tight junction, Golgi apparatus, trans-Golgi network membrane, Recycling endosome membrane, Cell projection, lamellipodium, Cytoplasmic vesicle, secretory vesicle membrane. [UniProt]

#### **Images**



#### ARG58982 anti-RAB13 antibody WB image

Western blot:  $25 \mu g$  of 293T cell lysate stained with ARG58982 anti-RAB13 antibody at 1:1000 dilution.