

## Rab 27

**Cat.No. 168 003; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)**

### Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	<b>WB:</b> 1 : 1000 (AP staining) <b>IP:</b> yes <b>ICC:</b> not tested yet <b>IHC:</b> not tested yet <b>IHC-P/FFPE:</b> not tested yet
Immunogen	Recombinant protein corresponding to AA 1 to 221 from rat Rab27A (UniProt Id: P23640)
Reactivity	Reacts with: rat (P23640, Q99P74), mouse (Q9ERI2, Q99P58). Other species not tested yet.
Specificity	Recognizes both isoforms rab 27A and B; no cross reaction to other rab proteins.
matching control	168-OP

### TO BE USED IN VITRO / FOR RESEARCH ONLY

### NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

**Rab 27** proteins are members of the Rab protein family that belongs to the ras-related superfamily of small monomeric GTPases. These proteins are involved in intracellular fusion reactions of vesicles or organelles with their target membranes. Two Rab 27 isoforms, Rab **27A** and **27B**, have been described so far.

Mutations in the Rab 27A gene have been shown to be responsible for the Griscelli syndrome characterized by pigment dilution of the hair and an uncontrolled T-lymphocyte and macrophage activation. This disorder is probably due to the dysfunction of melanosomes in melanocytes and lytic granules in CTLs. Additionally Rab 27A is located on mature insulin granules of pancreatic  $\beta$ -cells and is expressed in the pigment epithelium and choriocapillaris of the retina.

In patients who suffer from Griscelli syndrome because of missense mutations in the Rab 27A gene, Rab 27B is upregulated and partially compensates for Rab 27A dysfunction. Rab 27B also regulates amylase secretion in parotid acinar cells.

Recently it has been shown that Rab 27 is also involved in synaptic transmission in *C. elegans*.

### Selected References SYSY Antibodies

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### Selected General References

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The small GTPase Rab27B regulates amylase release from rat parotid acinar cells.

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Biochemical and biophysical research communications (2004) 323(4): 1157-62.

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