

**Anti-Rab18 Picoband Antibody**  
**Catalog # ABO12477****Specification**

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**Anti-Rab18 Picoband Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q9NP72</a>
Host	Rabbit
Reactivity	Human, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for Ras-related protein Rab-18(RAB18) detection. Tested with WB in Human;Rat.

**Reconstitution**

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

**Anti-Rab18 Picoband Antibody - Additional Information**

**Gene ID** 22931

**Other Names**

Ras-related protein Rab-18, RAB18

**Calculated MW**

22977 MW KDa

**Application Details**

Western blot, 0.1-0.5 µg/ml, Human, Rat<br>

**Subcellular Localization**

Cell membrane ; Lipid-anchor ; Cytoplasmic side .

**Tissue Specificity**

Ubiquitous.

**Protein Name**

Ras-related protein Rab-18

**Contents**

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>.

**Immunogen**

A synthetic peptide corresponding to a sequence at the C-terminus of human Rab18 (156-192aa DGVQCAFEELVEKIIQTPGLWESENQNKGVKLSHREE), identical to the related mouse sequence, and different from the related rat sequence by one amino acid.

**Purification**

Immunogen affinity purified.

**Cross Reactivity**

No cross reactivity with other proteins.

**Storage**

**At -20°C for one year. After reconstitution, 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.**

**Anti-Rab18 Picoband Antibody - Protein Information**

**Name** RAB18 ([HGNC:14244](#))

**Function**

The small GTPases Rab are key regulators of intracellular membrane trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed: [24891604](http://www.uniprot.org/citations/24891604), PubMed: [30970241](http://www.uniprot.org/citations/30970241)). 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 (PubMed: [24891604](http://www.uniprot.org/citations/24891604), PubMed: [30970241](http://www.uniprot.org/citations/30970241)). RAB18 is required for the localization of ZFYVE1 to lipid droplets and for its function in mediating the formation of endoplasmic reticulum-lipid droplets (ER-LD) contacts (PubMed: [30970241](http://www.uniprot.org/citations/30970241)). Also required for maintaining endoplasmic reticulum structure (PubMed: [24891604](http://www.uniprot.org/citations/24891604)). Plays a role in apical endocytosis/recycling (By similarity). Plays a key role in eye and brain development and neurodegeneration (PubMed: [21473985](http://www.uniprot.org/citations/21473985)).

**Cellular Location**

Endoplasmic reticulum membrane. Golgi apparatus, cis-Golgi network membrane Lipid droplet. Apical cell membrane {ECO:0000250|UniProtKB:P35293}. Note=Localized to the ER membrane as well as to the cis-Golgi in fibroblasts.

**Tissue Location**

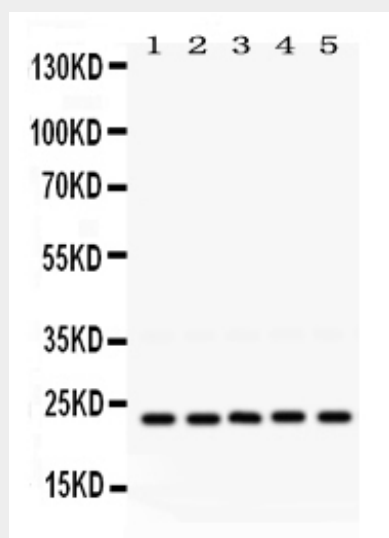
Ubiquitous.

**Anti-Rab18 Picoband Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

**Anti-Rab18 Picoband Antibody - Images**



Anti- Rab18 Picoband antibody, ABO12477, Western blottingAll lanes: Anti Rab18 (ABO12477) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: Rat Lung Tissue Lysate at 50ugLane 3: 293T Whole Cell Lysate at 40ugLane 4: HELA Whole Cell Lysate at 40ugLane 5: HEPG2 Whole Cell Lysate at 40ugPredicted bind size: 23KDObserved bind size: 23KD

#### **Anti-Rab18 Picoband Antibody - Background**

Ras-related protein Rab-18 is a protein that in humans is encoded by the RAB18 gene. It is a ubiquitously expressed protein with particularly high expression in the brain. The protein encoded by this gene is a member of a family of Ras-related small GTPases that regulate membrane trafficking in organelles and transport vesicles. Knockdown studies in zebrafish suggest that this protein may have a role in eye and brain development. Mutations in this gene are associated with Warburg micro syndrome type 3. Alternatively spliced transcript variants have been found for this gene.