

Anti-Rab18 Picoband Antibody

Catalog # ABO12477

Specification

Anti-Rab18 Picoband Antibody - Product Information

ApplicationWBPrimary AccessionQ9NP72HostRabbitReactivityHuman, RatClonalityPolyclonalFormatLyophilizedDescriptionRabbit 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

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 Na2HPO4, 0.05mg NaN3.

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 r°Constitution, 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, PubMed: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, PubMed:24891604, PubMed:24891604, PubMed:24891604, PubMed:24891604, PubMed: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). Also required for maintaining endoplasmic reticulum structure

target="_blank">30970241). Also required for maintaining endoplasmic reticulum structure (PubMed:24891604). Plays a role in apical endocytosis/recycling (By similarity). Plays a key role in eye and brain development and neurodegeneration (PubMed: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.

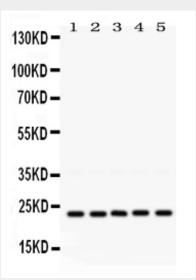
Anti-Rab18 Picoband Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

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.