

Anti-Rab18 Picoband Antibody

Catalog # ABO12477

Product Information

Application	WB
Primary Accession	Q9NP72
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.

Additional Information

Gene ID	22931
Other Names	Ras-related protein Rab-18, RAB18
Calculated MW	22977
Application Details	Western blot, 0.1-0.5 µg/ml, Human, Rat
Subcellular Localization	Cell membrane ; Lipid-anchor ; Cytoplasmic side .
Tissue Specificity	Ubiquitous.
Source	Eukaryota
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 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.

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: 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 (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.

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.

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

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.