

Phospho-RAB24(S95) Antibody Blocking peptide Synthetic peptide Catalog # BP3367a

Specification

Phospho-RAB24(S95) Antibody Blocking peptide - Product Information

Primary Accession

<u>Q969Q5</u>

Phospho-RAB24(S95) Antibody Blocking peptide - Additional Information

Gene ID 53917

Other Names Ras-related protein Rab-24, RAB24

Target/Specificity

The synthetic peptide sequence used to generate the antibody AP3367a was selected from the region of human Phospho-RAB24-S95. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions This product is for research use only. Not for use in diagnostic or therapeutic procedures.

Phospho-RAB24(S95) Antibody Blocking peptide - Protein Information

Name RAB24 (HGNC:9765)

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. RAB24 is an atypical RAB protein that presents low GTPase activity and thereby exists predominantly in the GTP-bound active state. RAB24 is required for the clearance of late autophagic vacuoles under basal conditions. It is not needed for starvation-induced autophagy. Involved in the modulation of meiotic apparatus assembly and meiotic progression during oocyte maturation, possibly through regulation of kinetochore-microtubule interaction.

Cellular Location

Cytoplasm, cytosol. Membrane; Lipid-anchor Cytoplasmic vesicle, autophagosome membrane



{ECO:0000250|UniProtKB:P35290}. Cytoplasm, perinuclear region

{ECO:0000250|UniProtKB:P35290}. Cytoplasm, cytoskeleton, spindle

{ECO:0000250|UniProtKB:P35290}. Note=Only about 20% is recovered in the particulate fraction (PubMed:10660536). RAB24 localizes in perinuclear region and in the limiting membranes of autophagic compartments under basal conditions. RAB24 is localized in the cytoplasm with an accumulated distribution in nuclear region at germinal vesicle (GV) stage of oocyte meiotic progression. At pre-metaphase I stage, localized in the cytoplasm with a particular concentration around chromosomes. As the oocytes enter metaphase I, located to the spindle region. Similar distribution pattern is observed in MII oocytes (By similarity). {ECO:0000250|UniProtKB:P35290, ECO:0000269|PubMed:10660536}

Phospho-RAB24(S95) Antibody Blocking peptide - Protocols

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

<u>Blocking Peptides</u>

Phospho-RAB24(S95) Antibody Blocking peptide - Images

Phospho-RAB24(S95) Antibody Blocking peptide - Background

Macroautophagy is the major inducible pathway for the general turnover of cytoplasmic constituents in eukaryotic cells, it is also responsible for the degradation of active cytoplasmic enzymes and organelles during nutrient starvation. Macroautophagy involves the formation of double-membrane bound autophagosomes which enclose the cytoplasmic constituent targeted for degradation in a membrane bound structure, which then fuse with the lysosome (or vacuole) releasing a single-membrane bound autophagic bodies which are then degraded within the lysosome (or vacuole). The GTPase Rab24 is thought to be involved in the regulation of vesicular transport associated with autophagy.

Phospho-RAB24(S95) Antibody Blocking peptide - References

Maltese, W.A., BMC Cell Biol. 3, 25 (2002)Erdman, R.A., J. Biol. Chem. 275 (6), 3848-3856 (2000)Olkkonen, V.M., J. Cell. Sci. 106 (PT 4), 1249-1261 (1993)