

Rab24 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)

Catalog # AP58104

Product Information

Application	IHC-P, IHC-F, IF, E
Primary Accession	Q969Q5
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	23124
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Rab24
Epitope Specificity	1-100/203
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm, cytosol. Membrane; Lipid-anchor (By similarity). Note=Only about 20-25% is recovered in the particulate fraction.
SIMILARITY	Belongs to the small GTPase superfamily. Rab family.
SUBUNIT	Unlike other Rab family members, does not interact with GDP dissociation inhibitors (GDIs), including ARHGDIA and ARHGDIB. Interacts with ZFYVE20.
Post-translational modifications	Isoprenylation is inefficient compared to other Rab family members.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	A major contributor to cellular homeostasis is the ability of the cell to strike a balance between the formation and degradation/removal of its cellular components. This process of internal cellular turn-over is called autophagy (self-eating), and is facilitated by a pathway of around 16 interacting proteins in the human. The GTPase Rab24 is thought to be involved in the regulation of vesicular transport associated with autophagy.

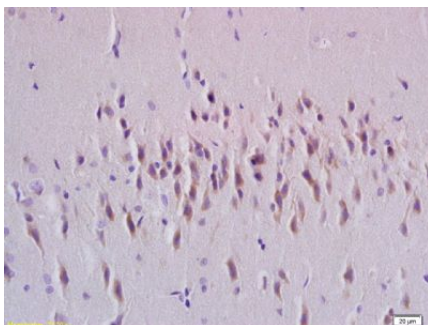
Additional Information

Gene ID	53917
Other Names	Ras-related protein Rab-24, RAB24
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

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}

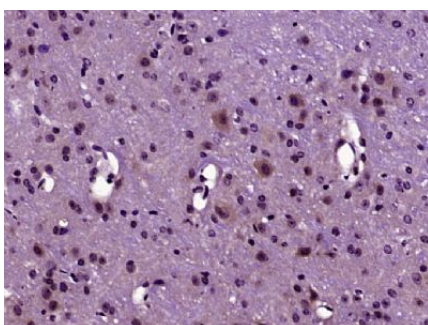
Images



Tissue/cell: rat brain tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-Rab24 Polyclonal Antibody, Unconjugated(AP58104) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining



Paraformaldehyde-fixed, paraffin embedded (mouse brain tissue); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Rab24) Polyclonal Antibody, Unconjugated (AP58104) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.

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