

RAB31 Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51839

Product Information

Application WB, ICC Primary Accession Q13636

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW21700

Additional Information

Gene ID 11031

Other Names Ras-related protein Rab-31, Ras-related protein Rab-22B, RAB31, RAB22B

Dilution WB~~1:1000 ICC~~N/A

Format 0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%

Storage Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name RAB31 (<u>HGNC:9771</u>)

Synonyms RAB22B

Function The small GTPases Rab are key regulators of intracellular membrane

trafficking, from the formation of transport vesicles to their fusion with membranes (PubMed: 11784320). Rabs cycle between an inactive GDP-bound form and an active GTP-bound form that is able to recruit to membranes different set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. Required for the integrity and for normal function of the Golgi apparatus and the trans- Golgi network. Plays a role in insulin-stimulated translocation of GLUT4 to the cell membrane. Plays

a role in M6PR transport from the trans-Golgi network to endosomes. Plays a role in the internalization of EGFR from the cell membrane into endosomes. Plays a role in the maturation of phagosomes that engulf pathogens, such as

S.aureus and M.tuberculosis.

Cellular Location Golgi apparatus, trans-Golgi network. Golgi apparatus, trans-Golgi network

membrane; Lipid-anchor; Cytoplasmic side. Early endosome. Cytoplasmic vesicle, phagosome. Cytoplasmic vesicle, phagosome membrane;

Lipid-anchor; Cytoplasmic side. Note=Rapidly recruited to phagosomes

containing S.aureus or M.tuberculosis (PubMed:21255211)

Tissue Location

Highest expression in placenta and brain with lower levels in heart and lung. Not detected in liver, skeletal muscle, kidney or pancreas.

Background

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 set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. Required for the integrity and for normal function of the Golgi apparatus and the trans-Golgi network. Plays a role in insulin-stimulated translocation of GLUT4 to the cell membrane. Plays a role in M6PR transport from the trans-Golgi network to endosomes. Plays a role in the internalization of EGFR from the cell membrane into endosomes. Plays a role in the maturation of phagosomes that engulf pathogens, such as S.aureus and M.tuberculosis.

References

Chen D., et al. Gene 174:129-134(1996).
Bao X., et al. Eur. J. Biochem. 269:259-271(2002).
Opdam F.J.M., et al. Submitted (FEB-2000) to the EMBL/GenBank/DDBJ databases.
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