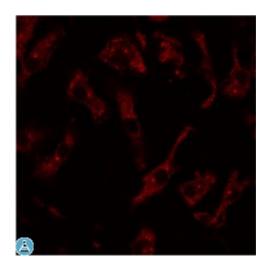


Anti-Rab8 antibody



Description

Goat polyclonal antibody to mouse Rab8. Rab8 belongs to the small GTPase superfamily, Rab family. It has cell-type specific function during the process of exocytosis and coordinates regulation of the cytoskeleton. Rab8 also appears to interface with endocytic recycling circuits. At the molecular level, this GTPase regulates both the export of vesicles from the trans-Golgi apparatus, and the directed translocation along actin filaments and microtubules.

Model STJ140064

Host Goat

Reactivity Avian, Bovine, Canine, Donkey, Feline, Goat, Guinea Pig, Hamster, Horse,

Human, Mouse, Other, Porcine, Rabbit, Rat, Sheep, Simian

Applications IF, IHC, WB

Immunogen Purified recombinant peptides derived from within residues 107 aa to the C-

terminus of mouse Rab8a and Rab8b produced in E. coli.

Immunogen Region C-Term

Gene ID <u>4218</u>

Gene Symbol RAB8A

Dilution range Western blot 1:250-1:1,000 Immunofluorescence 1:50-1:250

Immunohistochemistry (paraffin) 1:250-1:1,500 Immunohistochemistry

(frozen) 1:250-1:1,500

Specificity Detects total Rab8 protein in the following human, rat and mouse whole cell

lysates and transfected cells with GFP-Rab8a and GFP-Rab8b cds by Western

blot.

Purification This antibody is epitope-affinity purified from goat antiserum.

Note For research use only (RUO).

Ras-related protein Rab-8A (Oncogene c-mel) **Protein Name**

24 kDa Molecular Weight

Clonality Polyclonal

Unconjugated Conjugation

Isotype IgG

Formulation PBS, 20% glycerol and 0.05% sodium azide.

Concentration 3 mg/mL

Store at -20°, and avoid repeated freeze-thaw cycles. **Storage Instruction**

HGNC:7007OMIM:165040 **Database Links**

Alternative Names Ras-related protein Rab-8A (Oncogene c-mel)

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. That Rab is involved in polarized vesicular trafficking and neurotransmitter release. Together with RAB11A, RAB3IP, the exocyst

complex, PARD3, PRKCI, ANXA2, CDC42 and DNMBP promotes

transcytosis of PODXL to the apical membrane initiation sites (AMIS), apical surface formation and lumenogenesis. Together with MYO5B and RAB11A

participates in epithelial cell polarization. Plays an important role in

ciliogenesis. Together with MICALL2, may also regulate adherens junction assembly. May play a role in insulin-induced transport to the plasma membrane of the glucose transporter GLUT4 and therefore play a role in

glucose homeostasis. Involved in autophagy.

Cellular Localization Cell membrane Golgi apparatus Recycling endosome membrane Cell

projection, cilium Cytoplasmic vesicle, phagosome Cytoplasmic vesicle, phagosome membrane Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole Cytoplasm, cytoskeleton, cilium basal body. Colocalizes with OPTN at the Golgi complex and in vesicular structures close to the plasma membrane. In the GDP-bound form, present in the perinuclear region. Shows a polarized distribution to distal regions of cell protrusions in the GTP-bound form . Colocalizes with PARD3, PRKCI, EXOC5, OCLN, PODXL and RAB11A in apical membrane initiation sites (AMIS) during the generation of apical surface and lumenogenesis. Localizes to tubular recycling endosome. Recruited to phagosomes containing S.aureus or

M.tuberculosis.