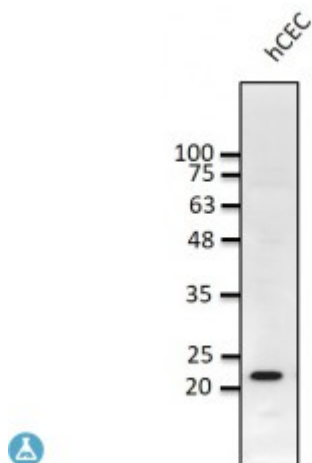


Anti-Rab1b antibody



Description

Goat polyclonal antibody to Rab1b. Rab1b belongs to the small GTPase superfamily, Rab family. Rab1b together with Rab1a control vesicle traffic from the endoplasmic reticulum to the Golgi apparatus.

Model	STJ140140
Host	Goat
Reactivity	Avian, Bovine, Canine, Donkey, Feline, Goat, Guinea Pig, Hamster, Horse, Human, Mouse, Other, Porcine, Rabbit, Rat, Sheep, Simian
Applications	WB
Immunogen	Purified recombinant peptide derived from within residues 110 aa to the C-terminus of Rab1b produced in E. coli.
Immunogen Region	C-Term
Gene ID	81876
Gene Symbol	RAB1B
Dilution range	Western blot 1:250-1:5,000 Immunofluorescence ND Immunohistochemistry (paraffin) ND Immunohistochemistry (frozen) ND
Specificity	Detects endogenous levels of Rab1b protein by Western blot in whole cell lysates and transfected cells with GFP-Rab1b cds.
Purification	This antibody is epitope-affinity purified from goat antiserum.
Note	For research use only (RUO).
Protein Name	Ras-related protein Rab-1B
Molecular Weight	23 kDa

Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS, 20% glycerol and 0.05% sodium azide.
Concentration	3 mg/mL
Storage Instruction	Store at -20°, and avoid repeated freeze-thaw cycles.
Database Links	HGNC:183700MIM:612565
Alternative Names	Ras-related protein Rab-1B
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 set of downstream effectors directly responsible for vesicle formation, movement, tethering and fusion. RAB1B regulates vesicular transport between the endoplasmic reticulum and successive Golgi compartments. Plays a role in the initial events of the autophagic vacuole development which take place at specialized regions of the endoplasmic reticulum.
Cellular Localization	Cytoplasm Membrane Preautophagosomal structure membrane. Targeted by REP1 to membranes of specific subcellular compartments including endoplasmic reticulum, Golgi apparatus, and intermediate vesicles between these two compartments. In the GDP-form, colocalizes with GDI in the cytoplasm .
Post-translational Modifications	Prenylated; by GGTase II, only after interaction of the substrate with Rab escort protein 1 (REP1). AMPylation at Tyr-77 by L.pneumophila DrrA occurs in the switch 2 region and leads to moderate inactivation of the GTPase activity. It appears to prolong the lifetime of the GTP state of RAB1B by restricting access of GTPase effectors to switch 2 and blocking effector-stimulated GTP hydrolysis, thereby rendering RAB1B constitutively active. It is later de-AMPylation by L.pneumophila SidD, releasing RAB1B from bacterial phagosomes. Phosphocholinated at Ser-76 by L.pneumophila AnkX, leading to displace GDP dissociation inhibitors (GDI). Both GDP-bound and GTP-bound forms can be phosphocholinated. Dephosphocholinated by L.pneumophila Lem3, restoring accessibility to L.pneumophila GTPase effector LepB.