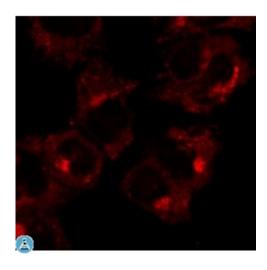


## Anti-Rab1 antibody



**Description** Goat polyclonal antibody to mouse Rab1. Rab1 belongs to the small

GTPase superfamily, Rab family. Rab1 controls vesicle traffic from the

endoplasmic reticulum to the Golgi apparatus.

Model STJ140056

**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 110 aa to the C-

terminus of mouse Rab1a and Rab1b produced in E. coli.

**Immunogen Region** C-Term

**Gene ID** 5861

Gene Symbol RAB1A

**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 Rab1 protein by Western blot in the following human, rat and

mouse whole cell lysates and transfected cells with GFP-Rab1a and 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-1A (YPT1-related protein)

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:9758OMIM:179508

Alternative Names Ras-related protein Rab-1A (YPT1-related protein)

**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. RAB1A regulates vesicular protein transport from the endoplasmic reticulum (ER) to the Golgi compartment and on to the cell surface, and plays a role in IL-8 and growth hormone secretion. Regulates the level of CASR present at the cell membrane. Plays a role in cell adhesion and

cell migration, via its role in protein trafficking. Plays a role in

autophagosome assembly and cellular defense reactions against pathogenic bacteria. Plays a role in microtubule-dependent protein transport by early

endosomes and in anterograde melanosome transport.

Cellular Localization Golgi apparatus Endoplasmic reticulum Early endosome Cytoplasm, cytosol

Membrane Melanosome. Alternates between membrane-associated and

cytosolic forms.

**Post-translational** Phosphorylated by CDK1 kinase during mitosis. Phosphocholinated at Ser-79

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.

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