

ARG42509 anti-RAB1 antibody

Package: 100 µg
Store at: -20°C

Summary

Product Description	Goat Polyclonal antibody recognizes RAB1
Tested Reactivity	Hu, Ms, Rat, Dog, Mk
Tested Application	ICC/IF, IHC-Fr, IHC-P, WB
Host	Goat
Clonality	Polyclonal
Isotype	IgG
Target Name	RAB1
Species	Mouse
Immunogen	Purified recombinant peptides within aa. 110 to the C-terminus of Mouse RAB1A and RAB1B.
Conjugation	Un-conjugated
Alternate Names	RAB1; YPT1-related protein; YPT1; Ras-related protein Rab-1A

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:100 - 1:250
	IHC-Fr	1:250 - 1:1500
	IHC-P	1:250 - 1:1500
	WB	1:250 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 46 kDa	

Properties

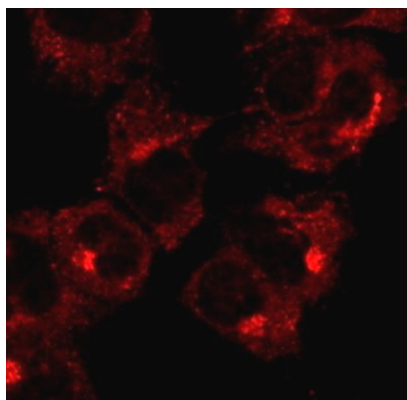
Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS, 0.05% Sodium azide and 20% Glycerol.
Preservative	0.05% Sodium azide
Stabilizer	20% Glycerol
Concentration	3 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

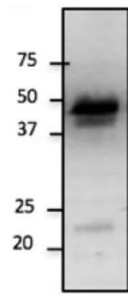
Gene Symbol	RAB1A
Gene Full Name	RAB1A, member RAS oncogene family
Background	This gene encodes a member of the Ras superfamily of GTPases. Members of the gene family cycle between inactive GDP-bound and active GTP-bound forms. This small GTPase controls vesicle traffic from the endoplasmic reticulum to the Golgi apparatus. Multiple alternatively spliced transcript variants have been identified for this gene which encode different protein isoforms. [provided by RefSeq, Oct 2008]
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. [UniProt]
Calculated Mw	23 kDa
PTM	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. [UniProt]
Cellular Localization	Golgi apparatus. Endoplasmic reticulum. Early endosome. Cytoplasm, cytosol. Membrane. Melanosome. Note=Alternates between membrane-associated and cytosolic forms. [UniProt]

Images



ARG42509 anti-RAB1 antibody ICC/IF image

Immunofluorescence: COS7 cells were fixed with 4% PFA. Cells were stained with ARG42509 anti-RAB1 antibody at 1:50 dilution.



GFP-RAB1A
transfected HEK293

ARG42509 anti-RAB1 antibody WB image

Western blot: GFP-RAB1A transfected HEK293 cells. 50 µg of cell lysate stained with ARG42509 anti-RAB1 antibody at 1:1000 dilution.