

Rabbit RAB7L1 Polyclonal Antibody | anti-RAB7L1 antibody

Phospho-RAB7L1 (Thr71) Antibody

CATALOG #	HOST	REACTIVITY	APPLICATIONS
AAA329312	Rabbit	Human, Mouse, Rat	ELISA, Immunocytochemistry, Immunofluorescence, Immunohistochemistry, Western Blot

PRODUCT SYNONYMS

RAB7L1; Polyclonal Antibody; Phospho-RAB7L1 (Thr71) Antibody; DKFZp686P1051; Rab 7 like protein 1; RAB 7L; Rab-7-like protein 1; RAB29; Rab7 like protein 1; RAB7 member RAS oncogene family like 1; RAB7L; RAB7L_HUMAN; Ras related protein Rab 7L1; Ras related protein Rab7L1; Ras-related protein Rab-29; Ras-related protein Rab-7L1; anti-RAB7L1 antibody

PRODUCT SPECIFICATIONS

Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Isotype	Rabbit IgG
Specificity	Phospho-RAB7L1 (Thr71) Antibody detects endogenous levels of RAB7L1 only when phosphorylated at Rab29. Tissue Specificity: Ubiquitous.
Purity/Purification	The antibody is from purified rabbit serum by affinity purification via sequential chromatography on phospho-peptide and non-phospho-peptide affinity columns.
Form/Format	Liquid. Rabbit IgG in phosphate buffered saline, pH7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Concentration	1mg/ml (varies by lot)
Applicable Applications for anti-RAB7L1 antibody	ELISA (Peptide ELISA), ICC (Immunocytochemistry), IF (Immunofluorescence), IHC (Immunohistochemistry), WB (Western Blot)
Immunogen	A synthesized peptide derived from human Rab7L1 around the phosphorylation site of Rab29.
Conjugation	Unconjugated
Fragment	Fab fragment
Post Translational Modifications	In case of Salmonella enterica serovar Typhimurium (S.Typhimurium) infection, is proteolytically cleaved between Gly-41 and Val-42 by the GtgE viral protease encoded on the Gifsy-2 lysogen bacteriophage, which therefore prevents the recruitment of RAB29 to S.Typhimurium-containing vacuoles. In contrast, no proteolytically cleavage is detected in S.Typhi-infected cells.
Subunit Structure	Interacts with LRRK2.
Similarity	Belongs to the small GTPase superfamily. Rab family.
Subcellular Location	Cell membrane>Lipid-anchor>Cytoplasmic side. Cytoplasm. Cytoplasm>Perinuclear region. Golgi apparatus. Golgi apparatus>trans-Golgi network. Vacuole. Cytoplasm>Cytoskeleton. Note: Colocalizes with LRRK2 along tubular structures emerging from Golgi apparatus (PubMed:29212815). Colocalizes with GM130 at the Golgi apparatus (PubMed:22042847). Colocalizes with dynamic tubules emerging from and retracting to the Golgi apparatus (PubMed:22042847). Colocalizes with TGN46 at the trans-Golgi network (TGN) (PubMed:24788816). In Salmonella enterica serovar Typhi (S.Typhi) infected epithelial cells, is recruited and colocalized with both S.Typhi-containing vacuoles and dynamic tubules as well as those emerging from the vacuole toward the cell periphery (PubMed:22042847).
Preparation and Storage	Store at -20 degree C. Stable for 12 months from date of receipt.

IMAGES



Application Data

At 25 degree C. Samples were then incubated with primary Ab(At 37 degree C. An AlexaFluor594 conjugated goat anti-rabbit IgG(H+L) Ab(Red) and an AlexaFluor488 conjugated goat anti-mouse IgG(H+L) Ab(Green) were used as the secondary antibody. The nuclear counter stain is DAPI (blue).



IHC (Immunohistochemistry)

At 1/100 staining Human colorectal cancer by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



IHC (Immunohistochemistry)

Staining Rat heart tissue by IHC-P. The sample was formaldehyde fixed and a heat mediated antigen retrieval step in citrate buffer was performed. The sample was then blocked and incubated with the primary antibody at 4 degree C overnight. An HRP conjugated anti-Rabbit antibody was used as the secondary antibody.



WB (Western Blot)

Western blot analysis of extracts from Hela cells (serum starvation treatment), using Phospho-RAB7L1 (Thr71) Antibody. The lane on the left was treated with blocking peptide.

ADDITIONAL INFORMATION

Related Product Information for anti-RAB7L1 antibody

The small GTPases Rab are key regulators in vesicle trafficking. Essential for maintaining the integrity of the endosome-trans-Golgi network structure (By similarity). Together with LRRK2, plays a role in the retrograde trafficking pathway for recycling proteins, such as mannose 6 phosphate receptor (M6PR), between lysosomes and the Golgi apparatus in a retromer-dependent manner. Recruits LRRK2 to the Golgi complex and stimulates LRRK2 kinase activity. Regulates neuronal process morphology in the intact central nervous system (CNS) (By similarity). May play a role in the formation of typhoid toxin transport intermediates during Salmonella enterica serovar Typhi (S.Typhi) epithelial cell infection.

NCBI AND UNIPROT INFORMATION

NCBI GI #	208609962
NCBI GeneID	8934
NCBI Accession #	NP_001129134.1
NCBI GenBank Nucleotide #	NM_001135662.1
UniProt Accession #	O14966; B4E1K3; C9JE77
Molecular Weight	23,155 Da
NCBI Official Full Name	ras-related protein Rab-7L1 isoform 1
NCBI Official Synonym Full Names	RAB7, member RAS oncogene family-like 1
NCBI Official Symbol	RAB7L1
NCBI Official Synonym Symbols	RAB7L
NCBI Protein Information	ras-related protein Rab-7L1; rab-7-like protein 1
UniProt Protein Name	Ras-related protein Rab-7L1
UniProt Gene Name	RAB7L1
UniProt Entry Name	RAB7L_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

