

Basic Information

Product Name	Anti-RAB7A Antibody	
Gene Name	RAB7A	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	WB, IHC, IP, FCM, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human RAB7/RAB7A recombinant protein (Position: K21-E177).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	23 kDa	
Dilution Ratios	Western blot (WB):	1:500-2000
	Immunohistochemistry (IHC):	1:50-400
	ImmunoPrecipitation (IP):	1:250-300
	Flow Cytometry (Fixed):	1:50-200
	Enzyme linked immunosorbent assay (ELISA):	1:100-1000
	(Boiling the paraffin sections in 10mM citrate buffer,pH6.0,or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

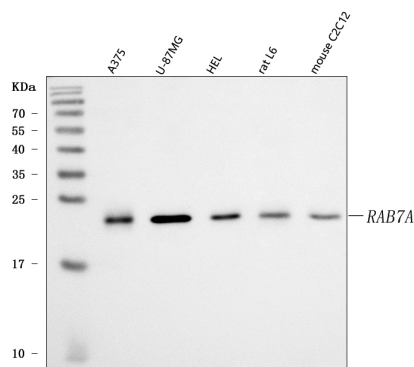
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Ras-related protein Rab-7a is a protein that in humans is encoded by the RAB7A gene. RAB7A functions as a key regulator in endo-lysosomal trafficking, governs early-to-late endosomal maturation, microtubule minus-end as well as plus-end directed endosomal migration and positions, and endosome-lysosome transport through different protein-protein interaction cascades. Furthermore, RAB7A is involved in regulation of some specialized endosomal membrane trafficking, such as maturation of melanosomes through modulation of SOX10 and the oncogene MYC. Mutations in the lysosomal pathway result in tumor progression in melanoma cells.

Selected Validation Data



Western blot analysis of anti- RAB7/RAB7A antibody (A02409-1). The sample well of each lane was loaded with 30ug of sample under reducing conditions.

Lane 1: human A375 whole cell lysates,

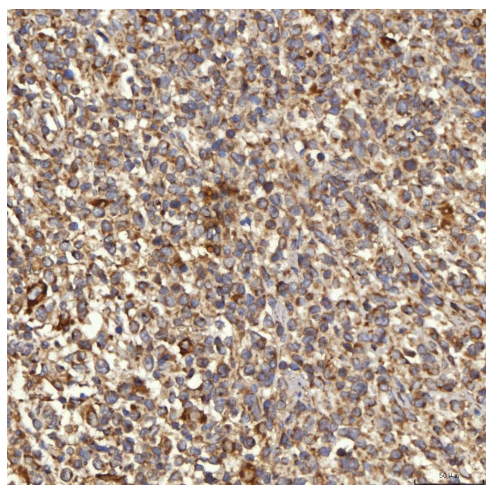
Lane 2: human U-87 MG whole cell lysates,

Lane 3: human HEL whole cell lysates,

Lane 4: rat L6 whole cell lysates,

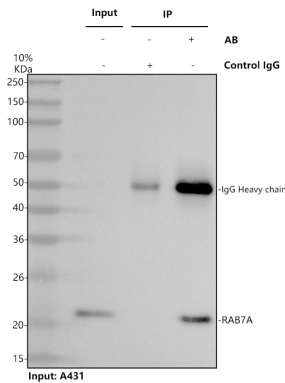
Lane 5: mouse C2C12 whole cell lysates.

Use rabbit anti- RAB7/RAB7A 1:1000, probed with a goat anti-rabbit IgG-HRP secondary antibody. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog#EK1002). A specific band was detected for RAB7/RAB7A at approximately 27KDa. The expected band size for RAB7/RAB7A is at 27KDa.



IHC analysis of RAB7A using anti-RAB7A antibody (A02409-1).

RAB7A was detected in a paraffin-embedded section of human diffuse large B cell lymphoma tissue. The tissue section was incubated with rabbit anti-RAB7A Antibody (A02409-1) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



IP analysis of RAB7A using anti-RAB7A antibody (A02409-1) in A431 whole cell lysate.

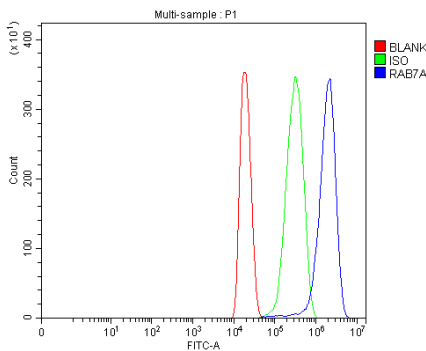
Western blot analysis of RAB7A using anti- RAB7A antibody (A02409-1).

Lane 1: A431 whole cell lysates(30ug),

Lane 2: Rabbit control IgG instead of anti- RAB7A antibody in A431 whole cell lysate,

Lane 3: anti- RAB7A antibody (2μg) + A431 whole cell lysate (500μg).

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti- RAB7A antigen affinity purified polyclonal antibody (A02409-1) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for RAB7A at approximately 23 kDa. The expected band size for RAB7A is at 23 kDa.



Flow Cytometry analysis of Hepa1-6 cells using anti-RAB7A antibody (A02409-1).

Overlay histogram showing Hepa1-6 cells stained with A02409-1 (Blue line). To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-RAB7A Antibody (A02409-1) at 1:100 dilution for 30 min at 20°C. Fluoro488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.