

Basic Information

Product Name	Anti-RAB7A Antibody
Gene Name	RAB7A
Source	Rabbit
Clonality	Polyclonal
Isotype	IgG
Species Reactivity	human, mouse, rat
Tested Application	WB, ICC/IF, FCM
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.
Immunogen	A synthetic peptide corresponding to a sequence at the C-terminus of human RAB7 identical to the related mouse sequence, and different from the related rat sequence by one amino acid.
Concentration	500 ug/ml
Purification	Immunogen affinity purified.
Observed MW	23 kDa
Dilution Ratios	Western blot (WB): 1:500-2000 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200

Storage

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

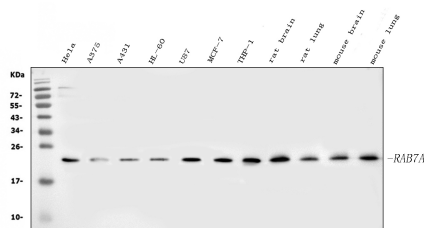
Background Information

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.

Reference

Anti-RAB7A Antibody被引用在2文献中。

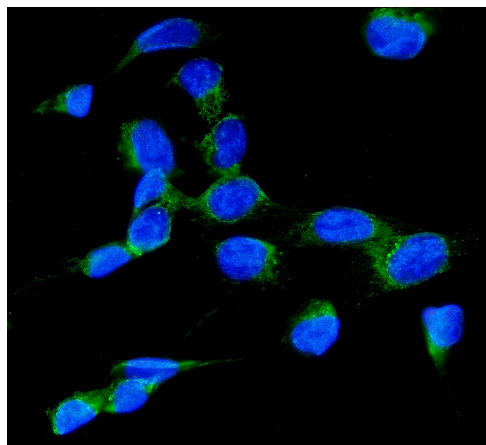
Selected Validation Data



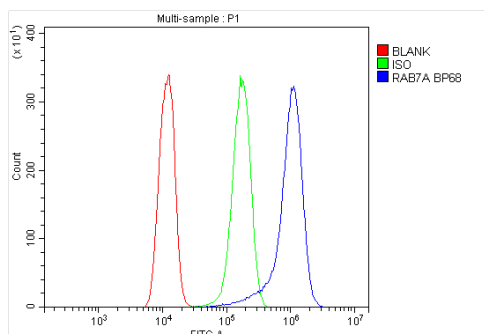
Western blot analysis of RAB7A using anti-RAB7A antibody (PB0927). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: HeLa whole cell lysates,
Lane 2: A375 whole cell lysates,
Lane 3: A431 whole cell lysates,
Lane 4: HL-60 whole cell lysates,
Lane 5: U87 whole cell lysates,
Lane 6: MCF-7 whole cell lysates,
Lane 7: THP-1 whole cell lysates,
Lane 8: rat brain tissue lysates,
Lane 9: rat lung tissue lysates,
Lane 10: mouse brain tissue lysates,
Lane 11: mouse lung tissue lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-RAB7A antigen affinity purified polyclonal antibody (PB0927) 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.



ICC/IF analysis of RAB7A using anti-RAB7A antibody (PB0927). RAB7A was detected in an immunocytochemical section of U2OS cells. The section was incubated with rabbit anti-RAB7A Antibody (PB0927) at a dilution of 1:100. Fluoro488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).



Flow Cytometry analysis of A431 cells using anti-RAB7A antibody (PB0927).

Overlay histogram showing A431 cells stained with PB0927 (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 (PB0927) 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.