

Anti-Flotillin 2/FLOT2 Antibody Picoband®

Catalog Number: PB9623

About FLOT2

FLOT2 (Flotillin 2), also known as ESA1 or M17S1, is a protein that in humans is encoded by the FLOT2 gene. Schroeder et al. (1991) isolated a cDNA for an epidermal surface antigen believed to be involved in epidermal cell adhesion. By analysis of a somatic cell hybrid panel and in situ hybridization using the ESA cDNA, the gene was mapped to 17q11-q12 in the region containing the NF1 gene. Bickel et al. (1997) found that mouse Flot2 consistently copurifies with Flot1 and with caveolin-1 in the purification of caveolin-rich membranes. Using a quantitative proteomic analysis of cultured mouse neuronal stem cells, Li et al. (2012) found that palmitoylation and oligomerization of flotillin-2 was abolished in homozygous Dhhc5 mutant neuronal stem cells. The absolute amount of flotillin-2 was not changed in Dhhc5 mutant neurons.

Overview

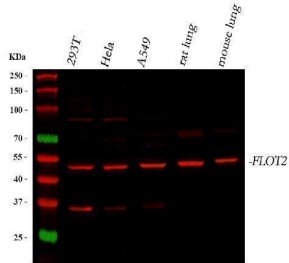
Product Name	Anti-Flotillin 2/FLOT2 Antibody Picoband®
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Flotillin 2/FLOT2 Antibody Picoband® catalog # PB9623. Tested in Flow Cytometry, IF, IHC, IHC-F, ICC, WB applications. This antibody reacts with Human, Mouse, Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.
Application	Flow Cytometry, IF, IHC, IHC-F, ICC, WB
Clonality	Polyclonal
Formulation	Each vial contains antibody formulated with stabilizing components, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , and 0.05 mg Na ₃ N. *This antibody is supplied in a stabilized formulation. Compatibility with conjugation reactions depends on the chemistry of the conjugation method used. For conjugation methods that are not compatible with the stabilizing components present in this formulation, a carrier-free antibody format is required.
Storage Instructions	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.
Host	Rabbit
Uniprot ID	Q14254

Technical Details

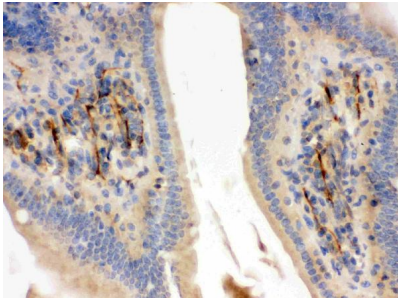
Immunogen	E.coli-derived human Flotillin 2 recombinant protein (Position: K169-K344). Human Flotillin 2 shares 100% amino acid (aa) sequence identity with both mouse and rat Flotillin 2.
Recommended Detection Systems	Boster recommends Enhanced Chemiluminescent Kit with anti-Rabbit IgG (EK1002) for Western

	blot, and HRP Conjugated anti-Rabbit IgG Super Vision Assay Kit (SV0002-1) for IHC(P), IHC(F) and ICC.
Cross Reactivity	No cross-reactivity with other proteins
Isotype	Rabbit IgG
Form	Lyophilized
Concentration	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml.
Purification	Immunogen affinity purified.
Suggested Dilutions	Western blot, 0.1-0.5ug/ml Immunohistochemistry (Paraffin-embedded Section), 0.5-1ug/ml Immunohistochemistry (Frozen Section), 0.5-1ug/ml Immunocytochemistry/Immunofluorescence, 2ug/ml Flow Cytometry (Fixed), 1-3ug/1x10 ⁶ cells

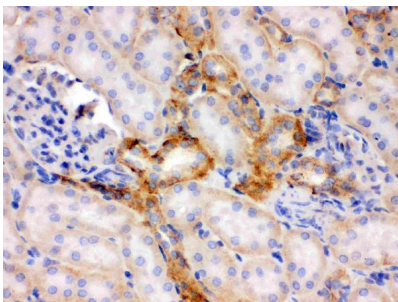
Anti-Flotillin 2/FLOT2 Antibody Picoband® (PB9623) Images



Western blot analysis of Flotillin 2 using anti-Flotillin 2 antibody (PB9623). Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 30 ug of sample under reducing conditions. Lane 1: human 293T whole cell lysates, Lane 2: human HeLa whole cell lysates, Lane 3: human A549 whole cell lysates, Lane 4: rat lung tissue lysates, Lane 5: mouse lung tissue lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-Flotillin 2 antigen affinity purified polyclonal antibody (Catalog # PB9623) at 0.5 ug/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-DyLight 647 Conjugated secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. A specific band was detected for Flotillin 2 at approximately 47 kDa. The expected band size for Flotillin 2 is at 47 kDa.

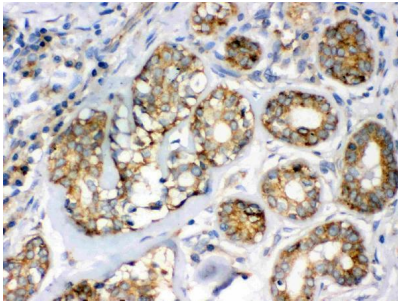


IHC analysis of Flotillin 2 using anti-Flotillin 2 antibody (PB9623). Flotillin 2 was detected in a paraffin-embedded section of mouse intestine tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Flotillin 2 Antibody (PB9623) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

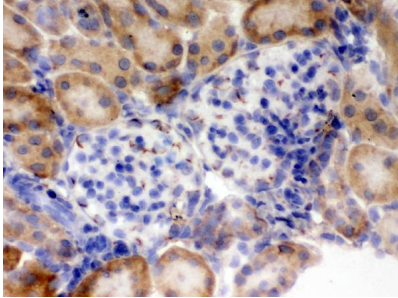


IHC analysis of Flotillin 2 using anti-Flotillin 2 antibody (PB9623). Flotillin 2 was detected in a paraffin-embedded section of rat kidney tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Flotillin 2 Antibody (PB9623) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.

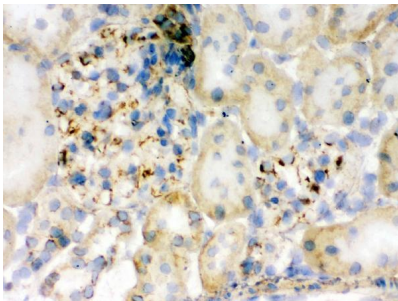
IHC analysis of Flotillin 2 using anti-Flotillin 2 antibody (PB9623). Flotillin 2 was detected in a paraffin-embedded section of human mammary cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH 8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1 ug/ml rabbit anti-Flotillin 2 Antibody (PB9623)



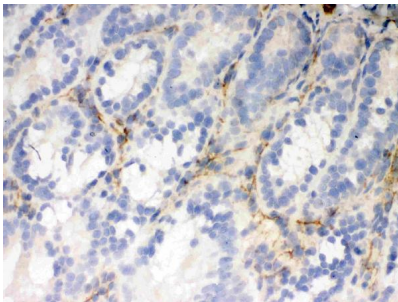
overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB as the chromogen.



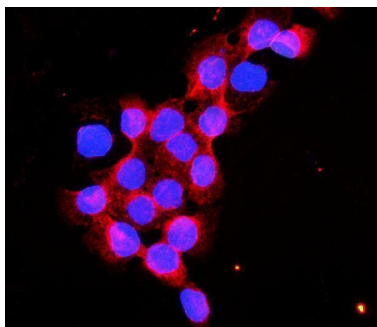
IHC analysis of Flotillin 2 using anti-Flotillin 2 antibody (PB9623). Flotillin 2 was detected in frozen section of mouse kidney tissue. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Flotillin 2 Antibody (PB9623) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



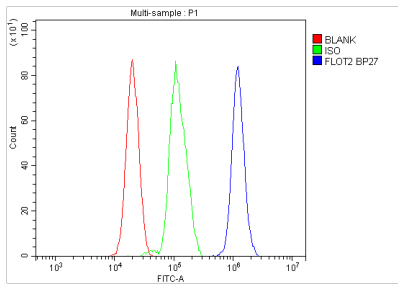
IHC analysis of Flotillin 2 using anti-Flotillin 2 antibody (PB9623). Flotillin 2 was detected in frozen section of rat kidney tissue. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Flotillin 2 Antibody (PB9623) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



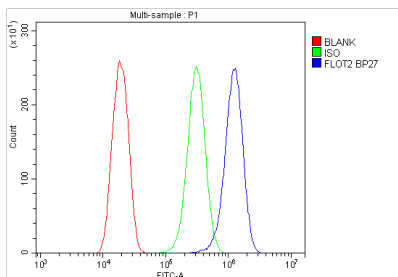
IHC analysis of Flotillin 2 using anti-Flotillin 2 antibody (PB9623). Flotillin 2 was detected in frozen section of rat small intestine tissue. The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Flotillin 2 Antibody (PB9623) overnight at 4°C. Biotinylated goat anti-rabbit IgG was used as secondary antibody and incubated for 30 minutes at 37°C. The tissue section was developed using Streptavidin-Biotin-Complex (SABC)(Catalog # SA1022) with DAB as the chromogen.



IF analysis of Flotillin 2 using anti-Flotillin 2 antibody (PB9623). Flotillin 2 was detected in immunocytochemical section of A431 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent (AR0022) for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-Flotillin 2 Antibody (PB9623) overnight at 4°C. DyLight® 550 Conjugated Goat Anti-Rabbit IgG (BA1135) was used as secondary antibody at 1:100 dilution and incubated for 30 minutes at 37°C. The section was counterstained with DAPI. Visualize using a fluorescence microscope and filter sets appropriate for the label used.



Flow Cytometry analysis of RH35 cells using anti-Flotillin 2 antibody (PB9623). Overlay histogram showing RH35 cells stained with PB9623 (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-Flotillin 2 Antibody (PB9623, 1 μ g/1x10⁶ cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 μ g/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



Flow Cytometry analysis of U2OS cells using anti-Flotillin 2 antibody (PB9623). Overlay histogram showing U2OS cells stained with PB9623 (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-Flotillin 2 Antibody (PB9623, 1 μ g/1x10⁶ cells) for 30 min at 20°C. DyLight® 488 conjugated goat anti-rabbit IgG (BA1127, 5-10 μ g/1x10⁶ cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1 μ g/1x10⁶) used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.

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Anti-Flotillin 2/FLOT2 Antibody

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