Product name:	Caveolin 2 (CAV2)
Cat number:	AB-81515
Conjugate:	Unconjugated
Size:	100µg
Clone:	POLY
Concentration:	1mg/ml
Host:	Rb
Isotype:	IgG
Reactivity:	Hu
Applications:	Western blot: 1:1000 Immunohistochemistry (Paraffin-embedded Section): 1:1000-1:500 Immunofluorescence: 1:200 Immunocytochemistry/Immunofluorescence: 1:200 Flow Cytometry: 1-3µg/1x106
Purification:	Aff. Pur.
Form:	Liquid
Buffer:	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.
Storage:	Store at -20˚C for one year from date of receipt. Avoid repeated freeze-thaw cycles
Background:	Caveolin-2 is a protein that in humans is encoded by the CAV2 gene. It is mapped to 7q31.1-q31.2. The protein encoded by this gene is a majorcomponent of the inner surface of caveolae, small invaginations of the plasma membrane, and is involved in essential cellular functions, including signal transduction, lipid metabolism, cellular growth control and apoptosis. This protein may function as a tumor suppressor Caveolin-2 is a protein related to caveolin-1 which is derived caveolin-enriched membranes. CAV2 and CAV1 are similar in most respects andthey differ in their functional interactions with eterotrimeric G proteins. Both of them are expressed in neuronal cells. Caveolin-2 was upregulated in response to neuronal cell injury.

Western blot analysis of Caveolin-2 using anti-Caveolin-2 antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each lane was loaded with 50ug of sample under reducing conditions. Lane 1: human HT1080 whole cell lysates, Lane 2: human U20S whole cell lysates, Lane 3: human Caco-2 whole cell lysates, Lane 4: human Hela whole cell lysates, Lane 5: human A549 whole cell lysates, Lane 6: rat lung tissue lysates, Lane 7: mouse lung tissue lysates. After Electrophoresis, proteins were transferred to a Nitrocellulose membrane at 150mA 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- Caveolin-2 antigen affinity purified polyclonal antibody 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-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. A specific band was detected for Caveolin-2 at approximately 21KD. The expected band size for Caveolin-2 is at 21KD.

analysis of Caveolin-2 using anti-Caveolin-2 antibody. Caveolin-2 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti-Caveolin-2 Antibody 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 Strepavidin-Biotin-Complex (SABC) with DAB as the chromogen.

IHC analysis of Caveolin-2 using anti-Caveolin-2antibody. Caveolin-2 was detected in paraffin-embedded section of rat lung tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 1ug/ml rabbit anti- Caveolin-2 Antibody 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 Strepavidin-Biotin-Complex (SABC) DAB as the chromogen.

IF analysis of Caveolin-2 using anti-Caveolin-2 Antibody. Caveolin-2 was detected in paraffin-embedded section of human rectal cancer tissue. Heat mediated antigen retrieval was performed in EDTA buffer (pH8.0, epitope retrieval solution). The tissue section was blocked with 10% goat serum. The tissue section was then incubated with 2ug/mL rabbit anti-Caveolin-2 Antibody overnight at 4°C. DyLight®594 Conjugated Goat Anti-Rabbit IgG 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.

IF analysis of Caveolin-2 using anti-Caveolin-2 Antibody Caveolin-2 was detected in immunocytochemical section of A549 cells. Enzyme antigen retrieval was performed using IHC enzyme antigen retrieval reagent for 15 mins. The cells were blocked with 10% goat serum. And then incubated with 2ug/mL rabbit anti-Caveolin-2 Antibody overnight at 4°C. DyLight®488 Conjugated Goat Anti-Rabbit IgG 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 A549 cells using anti- Caveolin-2 antibody Overlay histogram showing A549 cells stained with (Blue line).The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-Caveolin-2 Antibody (1ug/1x106 cells) for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG 5-10ug/1x106 cells) was used as secondary antibody for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG (1ug/1x106) used under the same conditions. Unlabelled sample (Red line) was also used as a control.