

Basic Information

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|---------------------------|--|-------------|
| Product Name | Anti-Caveolin-2/CAV2 Antibody | |
| Gene Name | CAV2 | |
| Source | Rabbit | |
| Clonality | Polyclonal | |
| Isotype | IgG | |
| Species Reactivity | human, mouse, rat, monkey | |
| Tested Application | WB, IHC, ICC/IF, IF, FCM, ELISA | |
| Contents | 500 ug/ml antibody with PBS, 0.02% NaN3, 1 mg/ml BSA and 50% glycerol. | |
| Immunogen | E.coli-derived human Caveolin-2/CAV2 recombinant protein (Position: L3-D162). | |
| Concentration | 500 ug/ml | |
| Purification | Immunogen affinity purified. | |
| Observed MW | 22 kDa | |
| Dilution Ratios | Western blot (WB): | 1:5000-8000 |
| | Immunohistochemistry (IHC): | 1:50-400 |
| | Immunocytochemistry/Immunofluorescence (ICC/IF): | 1:50-400 |
| | Immunofluorescence (IF): | 1:50-400 |
| | 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

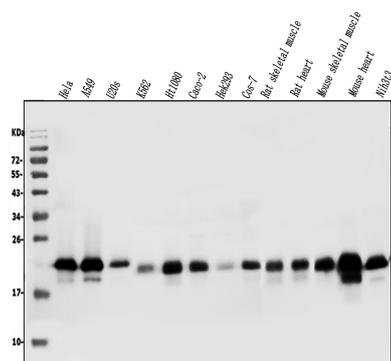
12 months from date of receipt, -20°C as supplied.

Background Information

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 major component 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 and they differ in their functional

interactions with heterotrimeric G proteins. Both of them are expressed in neuronal cells. Caveolin-2 was upregulated in response to neuronal cell injury.

Selected Validation Data



Western blot analysis of Caveolin-2/CAV2 using anti-Caveolin-2/CAV2 antibody (A01574). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: human HELA whole cell lysates,

Lane 2: human A549 whole cell lysates,

Lane 3: human U2OS whole cell lysates,

Lane 4: human K562 whole cell lysates,

Lane 5: human HT1080 whole cell lysates,

Lane 6: human CACO-2 whole cell lysates,

Lane 7: human HEK293 whole cell lysates,

Lane 8: Monkey COS-7 whole cell lysates,

Lane 9: Rat skeletal muscle tissue lysates,

Lane 10: Rat heart tissue lysates,

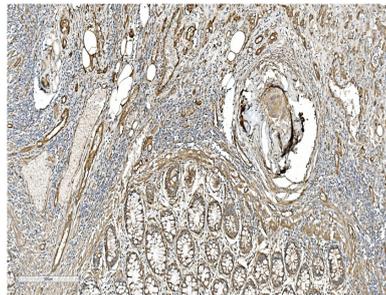
Lane 11: Mouse skeletal muscle tissue lysates,

Lane 12: Mouse heart tissue lysates,

Lane 13: Mouse NIH/3T3 whole cell lysates.

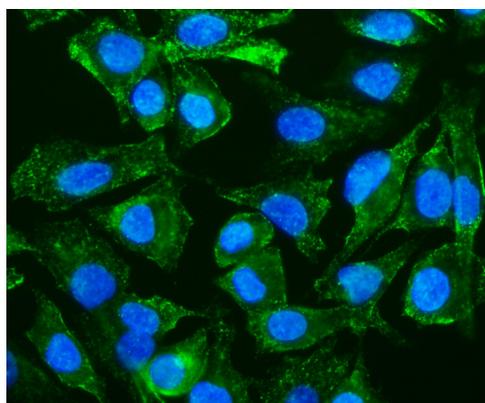
After electrophoresis, proteins were transferred to a membrane.

Then the membrane was incubated with rabbit anti-Caveolin-2/CAV2 antigen affinity purified polyclonal antibody (A01574) 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 Caveolin-2/CAV2 at approximately 22 kDa. The expected band size for Caveolin-2/CAV2 is at 18 kDa.



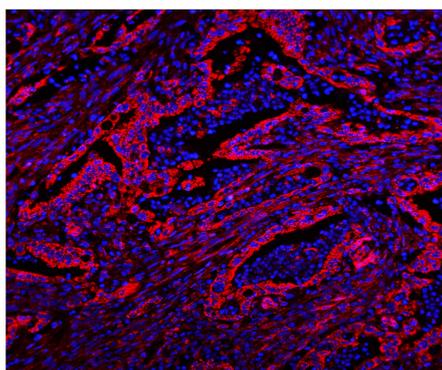
IHC analysis of Caveolin-2/CAV2 using anti-Caveolin-2/CAV2 antibody (A01574).

Caveolin-2/CAV2 was detected in a paraffin-embedded section of human rectal cancer tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-Caveolin-2/CAV2 Antibody (A01574) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.

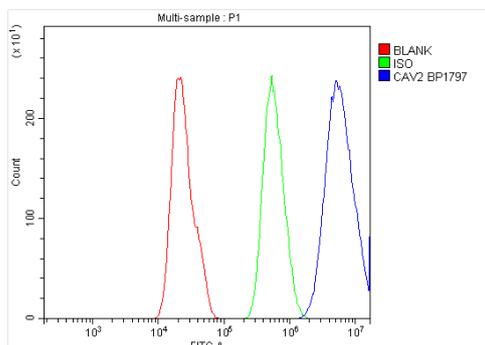


ICC/IF analysis of Caveolin-2/CAV2 using anti-Caveolin-2/CAV2 antibody (A01574).

Caveolin-2/CAV2 was detected in an immunocytochemical section of A549 cells. The section was incubated with rabbit anti-Caveolin-2/CAV2 Antibody (A01574) 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).



IF analysis using anti-CAV2 antibody (A01574). detected in paraffin-embedded section of human intestine cancer tissue. The tissue section were stained using the Fluoro594-conjugated Anti-rabbit IgG Secondary Antibody (red)(Catalog # BA1142) and counterstained with DAPI (blue).



Flow Cytometry analysis of A549 cells using anti-Caveolin-2/CAV2 antibody (A01574).

Overlay histogram showing A549 cells stained with A01574 (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-Caveolin-2/CAV2 Antibody (A01574) 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.