

Anti-Caveolin-2 Picoband Antibody

Catalog # ABO11862

Product Information

Application	WB, IHC-P, IF
Primary Accession	P51636
Host	Rabbit
Reactivity	Human, Mouse
Clonality	Polyclonal
Format	Lyophilized
Description	Rabbit IgG polyclonal antibody for Caveolin-2(CAV2) detection. Tested with WB, IHC-P, IHC-F in Human;Mouse.

Reconstitution Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Additional Information

Gene ID	858
Other Names	Caveolin-2, CAV2
Calculated MW	18291
Application Details	Immunohistochemistry(Frozen Section), 0.5-1 μ g/ml, Human, Mouse, - Immunohistochemistry(Paraffin-embedded Section), 0.5-1 μ g/ml, Human, By Heat Western blot, 0.1-0.5 μ g/ml, Human
Subcellular Localization	Nucleus. Cytoplasm. Golgi apparatus membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein. Potential hairpin-like structure in the membrane. Membrane protein of caveolae. Tyr-19-phosphorylated form is enriched at sites of cell-cell contact and is translocated to the nucleus in complex with MAPK1 in response to insulin (By similarity). Tyr-27-phosphorylated form is located both in the cytoplasm and plasma membrane. CAV1-mediated Ser-23-phosphorylated form locates to the plasma membrane. Ser-36-phosphorylated form resides in intracellular compartments. .
Tissue Specificity	Expressed in endothelial cells, smooth muscle cells, skeletal myoblasts and fibroblasts. .
Source	Eukaryota
Protein Name	Caveolin-2
Contents	Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na ₂ HPO ₄ , 0.05mg NaN ₃ .

Immunogen	E.coli-derived human Caveolin-2 recombinant protein (Position: M1-D162). Human Caveolin-2 shares 90% and 89% amino acid (aa) sequences identity with mouse and rat Caveolin-2, respectively.
Purification	Immunogen affinity purified.
Cross Reactivity	No cross reactivity with other proteins
Storage	At -20 °C for one year. After r ° Constitution, at 4 °C for one month. It ° Can also be aliquotted and stored frozen at -20 °C for a longer time.Avoid repeated freezing and thawing.
Sequence Similarities	Belongs to the caveolin family.

Protein Information

Name	CAV2
Function	May act as a scaffolding protein within caveolar membranes. Interacts directly with G protein alpha subunits and can functionally regulate their activity. Acts as an accessory protein in conjunction with CAV1 in targeting to lipid rafts and driving caveolae formation. The Ser-36 phosphorylated form has a role in modulating mitosis in endothelial cells. Positive regulator of cellular mitogenesis of the MAPK signaling pathway. Required for the insulin-stimulated nuclear translocation and activation of MAPK1 and STAT3, and the subsequent regulation of cell cycle progression (By similarity).
Cellular Location	Nucleus. Cytoplasm. Golgi apparatus membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein. Note=Potential hairpin-like structure in the membrane. Membrane protein of caveolae Tyr-19-phosphorylated form is enriched at sites of cell-cell contact and is translocated to the nucleus in complex with MAPK1 in response to insulin (By similarity). Tyr-27-phosphorylated form is located both in the cytoplasm and plasma membrane. CAV1-mediated Ser-23-phosphorylated form locates to the plasma membrane. Ser-36-phosphorylated form resides in intracellular compartments.
Tissue Location	Expressed in endothelial cells, smooth muscle cells, skeletal myoblasts and fibroblasts

Background

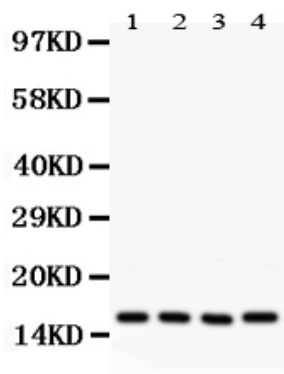
Caveolin-2 is a protein that in humans is encoded by the CAV2 gene. It is mapped to 7q31.1-q31.2. The protein encoded by this gene is a major component of the inner surface of caveolae, small invaginations of the plasma membrane, and is involved in essential cellular functions, including signal transduction, 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.

Images

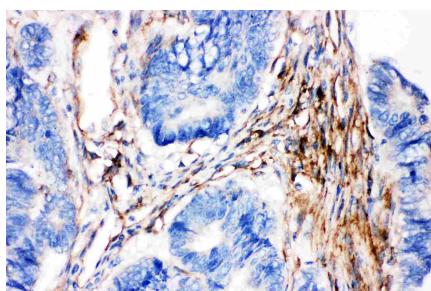
Anti- Caveolin-2 picoband antibody, ABO11862, Western blottingAll lanes: Anti Caveolin-2 (ABO11862) at



0.5ug/mlWB: Recombinant Human Caveolin-2 Protein
 0.5ngPredicted bind size: 40KDObserved bind size: 40KD



Anti- Caveolin-2 picoband antibody, ABO11862, Western blotting
 All lanes: Anti Caveolin-2 (ABO11862) at 0.5ug/ml
 Lane 1: Hela Whole Cell Lysate at 40ug
 Lane 2: HT1080 Whole Cell Lysate at 40ug
 Lane 3: Human Placenta Tissue Lysate at 50ug
 Lane 4: A431 Whole Cell Lysate at 40ug
 Predicted bind size: 17KDObserved bind size: 17KD



Anti- Caveolin-2 picoband antibody, ABO11862,IHC(P)
 IHC(P): Human Intestinal Cancer Tissue

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.