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Anti-Caveolin-2 Picoband Antibody

Catalog # ABO11862

Specification

Anti-Caveolin-2 Picoband Antibody - 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.

Anti-Caveolin-2 Picoband Antibody - Additional Information

Gene ID 858

Other Names
Caveolin-2, CAV2

Calculated MW
18291 MW KDa

Application Details
Immunohistochemistry(Frozen Section), 0.5-1 µg/ml, Human, Mouse, -
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/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. .

Protein Name
Caveolin-2

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na2HPO4, 0.05mg NaN3.

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.

Anti-Caveolin-2 Picoband Antibody - 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.

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Anti-Caveolin-2 Picoband Antibody - Protocols

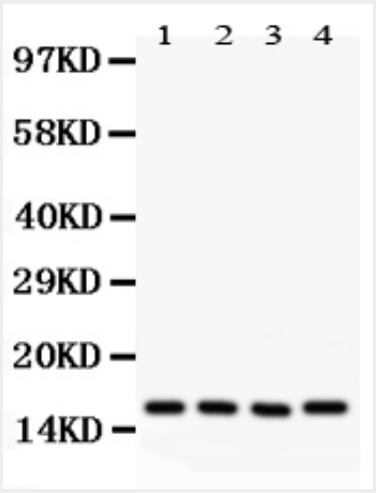
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Caveolin-2 Picoband Antibody - 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 blottingAll lanes: Anti Caveolin-2 (ABO11862) at 0.5ug/mlLane 1: Hela Whole Cell Lysate at 40ugLane 2: HT1080 Whole Cell Lysate at 40ugLane 3: Human Placenta Tissue Lysate at 50ugLane 4: A431 Whole Cell Lysate at 40ugPredicted bind size: 17KDObserved bind size: 17KD

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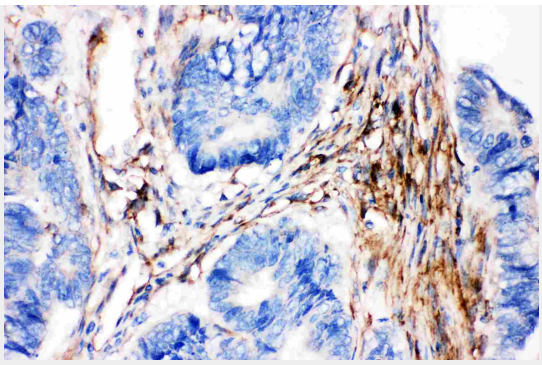

Anti- Caveolin-2 picoband antibody, ABO11862,IHC(P)IHC(P): Human Intestinal Cancer Tissue

Anti-Caveolin-2 Picoband Antibody - 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.