

**Anti-Caveolin-2 Picoband Antibody**  
Catalog # ABO11862**Specification****Anti-Caveolin-2 Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P51636</a>
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,  
-<br>Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By  
Heat<br>Western blot, 0.1-0.5 µg/ml, Human<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg NaN<sub>3</sub>.

#### **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 reconstitution, 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.

#### **Tissue Location**

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### **Anti-Caveolin-2 Picoband Antibody - Protocols**

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

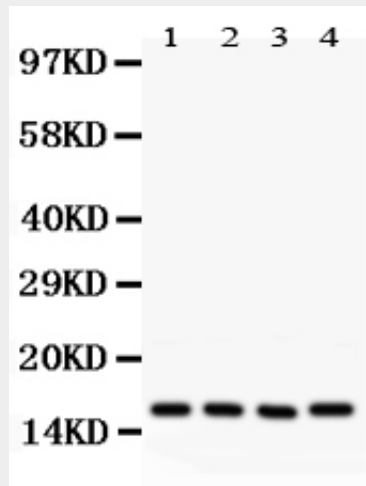
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)

- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

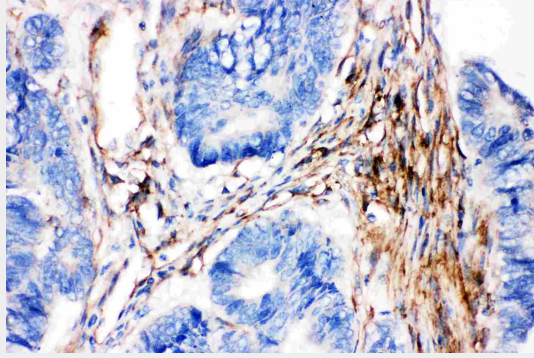
### Anti-Caveolin-2 Picoband Antibody - Images



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



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.