

Product datasheet

Anti-Caveolin-2 antibody ab75865

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概述

<b>产品名称</b>	Anti-Caveolin-2抗体
<b>描述</b>	兔多克隆抗体to Caveolin-2
<b>宿主</b>	Rabbit
<b>经测试应用</b>	<b>适用于:</b> ICC/IF, IHC-P, WB
<b>种属反应性</b>	<b>与反应:</b> Human <b>预测可用于:</b> Rabbit, Chimpanzee, Monkey, Baboon, Gorilla, Orangutan 
<b>免疫原</b>	Synthetic peptide corresponding to Human Caveolin-2 aa 1-100 (N terminal) conjugated to Keyhole Limpet Haemocyanin (KLH). Database link: <a href="#">P51636</a> (Peptide available as <a href="#">ab94548</a> , <a href="#">ab94548</a> )
<b>阳性对照</b>	Recombinant Human Caveolin-2 protein ( <a href="#">ab114515</a> ) can be used as a positive control in WB. This antibody gave a positive signal in Human lung tissue lysate, and in the following whole cell lysates: HUVEC; WI38; A431. ICC-IF: A431 cells.

性能

<b>形式</b>	Liquid
<b>存放说明</b>	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
<b>存储溶液</b>	Preservative: 0.02% Sodium Azide Constituents: 1% BSA, PBS, pH 7.4
<b>纯度</b>	Immunogen affinity purified
<b>克隆</b>	多克隆
<b>同种型</b>	IgG

应用

Our [Abpromise guarantee](#) covers the use of **ab75865** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

应用	Ab评论	说明
ICC/IF		Use a concentration of 1 - 5 µg/ml.
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		1/250. Detects a band of approximately 18 kDa (predicted molecular weight: 18 kDa).

## 靶标

<b>功能</b>	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.
<b>组织特异性</b>	Expressed in endothelial cells, smooth muscle cells, skeletal myoblasts and fibroblasts.
<b>序列相似性</b>	Belongs to the caveolin family.
<b>翻译后修饰</b>	Phosphorylated on serine and tyrosine residues. CAV1 promotes phosphorylation on Ser-23 which then targets the complex to the plasma membrane, lipid rafts and caveolae. Phosphorylation on Ser-36 appears to modulate mitosis in endothelial cells (By similarity). Phosphorylation on both Tyr-19 and Tyr-27 is required for insulin-induced 'Ser-727' phosphorylation of STAT3 and its activation. Phosphorylation on Tyr-19 is required for insulin-induced phosphorylation of MAPK1 and DNA binding of STAT3. Tyrosine phosphorylation is induced by both EGF and insulin.
<b>细胞定位</b>	Nucleus. Cytoplasm. Golgi apparatus membrane. Cell membrane. Membrane > caveola. 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.

## 图片



Western blot - Anti-Caveolin-2 antibody (ab75865)

**All lanes :** Anti-Caveolin-2 antibody (ab75865) at 1 µg/ml

**Lane 1 :** HUVEC (Human Umbilical Vein Endothelial Cell) Whole Cell Lysate

**Lane 2 :** WI-38 whole cell lysate ([ab3960](#))

**Lane 3 :** A431 (Human epithelial carcinoma cell line) Whole Cell Lysate

**Lane 4 :** Lung (Human) Tissue Lysate

Lysates/proteins at 10 µg per lane.

### Secondary

**All lanes :** Goat polyclonal to Rabbit IgG - H&L - Pre-Adsorbed (HRP) at 1/3000 dilution

Developed using the ECL technique.

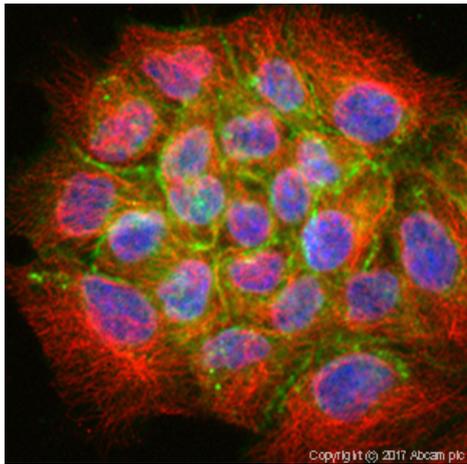
Performed under reducing conditions.

**Predicted band size:** 18 kDa

**Observed band size:** 18 kDa

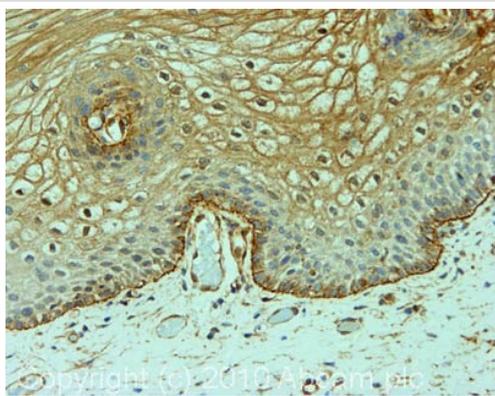
**Additional bands at:** 50 kDa. We are unsure as to the identity of these extra bands.

**Exposure time:** 30 seconds



Immunocytochemistry/ Immunofluorescence - Anti-Caveolin-2 antibody (ab75865)

ab75865 stained in A431 cells. Cells were fixed with 4% paraformaldehyde (10 min) at room temperature and incubated with PBS containing 10% goat serum, 0.3 M glycine, 1% BSA and 0.1% tween for 1h at room temperature to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody ab75865 at 5 µg/ml and ab7291 (Mouse monoclonal [DM1A] to alpha Tubulin - Loading Control) at 1/1000 dilution overnight at +4°C. The secondary antibodies were ab150120 (pseudo-colored red) and ab150081 (colored green) used at 1 µg/ml for 1 hour at room temperature. DAPI was used to stain the cell nuclei (colored blue) at a concentration of 1.43µM for 1 hour at room temperature.



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-2 antibody (ab75865)

IHC image of Calveolin 2 staining in human cervix carcinoma formalin fixed paraffin embedded tissue section, performed on a Leica Bond™ system using the standard protocol F. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH6, epitope retrieval solution 1) for 20 mins. The section was then incubated with ab75865, 5µg/ml, for 15 mins at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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