



## Rabbit Anti-Caveolin-2 antibody

SL6310R

<b>Product Name:</b>	Caveolin-2
<b>Chinese Name:</b>	细胞质膜微囊蛋白-2抗体
<b>Alias:</b>	CAV; CAV2; CAV2_HUMAN; Caveolae protein 20 kD; Caveolin 2; Caveolin2; Caveolin 2 isoform a and b; Caveolin 2 isoform c; Caveolin-2; MGC12294.
<b>Organism Species:</b>	Rabbit
<b>Clonality:</b>	Polyclonal
<b>React Species:</b>	Human,Mouse,Rat,
<b>Applications:</b>	IHC-P=1:400-800IHC-F=1:400-800 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
<b>Molecular weight:</b>	18kDa
<b>Cellular localization:</b>	The nucleuscytoplasmicThe cell membrane
<b>Form:</b>	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
<b>immunogen:</b>	KLH conjugated synthetic peptide derived from human Caveolin-2:41-140/162
<b>Lsotype:</b>	IgG
<b>Purification:</b>	affinity purified by Protein A
<b>Storage Buffer:</b>	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
<b>Storage:</b>	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
<b>PubMed:</b>	<a href="#">PubMed</a>
<b>Product Detail:</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.

**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.

**Subunit:**

Monomer or homodimer.

**Subcellular Location:**

Nucleus. Cytoplasm. Golgi apparatus membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein.

**Tissue Specificity:**

Expressed in endothelial cells, smooth muscle cells, skeletal myoblasts and fibroblasts.

**Post-translational modifications:**

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.

**Similarity:**

Belongs to the caveolin family.

**SWISS:**

P51636

**Gene ID:**

858

**Database links:**

[Entrez Gene: 858](#)Human

[Entrez Gene: 12390](#)Mouse

[Entrez Gene: 100362824](#)Rat

[Entrez Gene: 363425](#)Rat

[Omim: 601048](#)Human

[SwissProt: O46550](#)Dog

[SwissProt: P51636](#)Human

[SwissProt: Q9WVC3](#)Mouse

[SwissProt: Q2IBC5](#)Rat

[Unigene: 212332](#)Human

[Unigene: 603096](#)Human

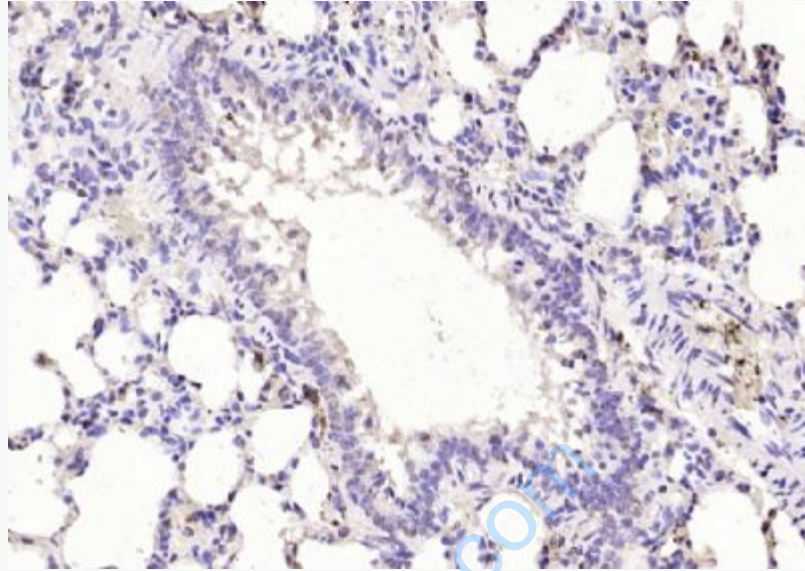
[Unigene: 396075](#)Mouse

[Unigene: 81070](#)Rat

**Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

Caveolin是细胞生长相关信号途径及Tumour发生发展过程中重要的抑制因子, Caveolae是The cell membrane内的特殊膜结构, 参与包括细胞的分子运输、细胞粘附和Signal transduction在内的多种细胞活动。Caveolin-1是Caveolae中重要的结构蛋白, 抑制细胞生长, 与多种人类Tumour发生发展相关的信号分子相互作用。Caveolin在Signal transduction的整合中起支架蛋白的作用。Caveolin构成了一个蛋白家族, 他们是细胞质膜中发夹样结构域的主要结构成分。Caveolin在Signal transduction的整合中起支架蛋白的作用。至今已经鉴定了3种Caveolin (Caveolin-1、2 和3), 它们具有不同的组织分布。



**Picture:**

Paraformaldehyde-fixed, paraffin embedded (rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (Caveolin-2) Polyclonal Antibody, Unconjugated (SL6310R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.