

Rabbit Anti-Caveolin-2 antibody

SL10224R

Product Name:	Caveolin-2
Chinese Name:	细胞质膜微囊蛋白-2抗体
Alias:	CAV; CAV2; CAV2_HUMAN; Caveolae protein 20 kD; Caveolin 2; Caveolin 2; Caveolin 2 isoform a and b; Caveolin 2 isoform c; Caveolin-2; MGC12294.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse,
Applications:	ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	18kDa
Cellular localization:	The nucleuscytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Caveolin-2:81-162/162
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	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.
PubMed:	<u>PubMed</u>
Product Detail:	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 insulininduced '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: 858Human

Entrez Gene: 12390Mouse

Entrez Gene: 100362824Rat

Entrez Gene: 363425Rat

Omim: 601048Human

SwissProt: O46550Dog

SwissProt: P51636Human

SwissProt: Q9WVC3Mouse

SwissProt: Q2IBC5Rat

Unigene: 212332Human

Unigene: 603096Human

Unigene: 396075 Mouse

Unigene: 81070Rat

Important Note:

MMM. SURIOROJ

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