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Rabbit Anti-phospho-Caveolin-2 (Tyr19) antibody

SL7523R

Product Name:	phospho-Caveolin-2 (Tyr19)
Chinese Name:	磷酸化细胞质膜微囊蛋白-2抗体
Alias:	Caveolin 2 (phospho Y19); p-Caveolin 2(phospho Y19); CAV; CAV2; CAV2_HUMAN; Caveolae protein 20 kD; Caveolin 2; Caveolin 2 isoform a and b; Caveolin 2 isoform c; Caveolin-2; MGC12294; CAV2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Mouse,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=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:	1mg/ml
immunogen:	KLH conjugated Synthesised phosphopeptide derived from mouse Caveolin2 around the phosphorylation site of Tyr19.:DA(p-Y)SH
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:	PubMed
Product Detail:	Cellular localization: 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. **Function:** May act as a scaffolding protein within caveolarmembranes. Interacts directly with G-protein alpha subunits and canfunctionally regulate their activity. Acts as an accessory proteinin conjunction with CAV1 in targeting to lipid rafts and drivingcaveolae formation. The Ser-36 phosphorylated form has a role inmodulating mitosis in endothelial cells. Positive regulator ofcellular mitogenesis of the MAPK signaling pathway. Required forthe insulin-stimulated nuclear translocation and activation ofMAPK1 and STAT3, and the subsequent regulation of cell cycleprogression (By similarity). **Subunit:** Monomer or homodimer. Interacts with CAV1; theinteraction forms a stable heterooligomeric complex that isrequired for targeting to lipid rafts and for caveolae formation.Tyrosine phosphorylated forms do not form heterooligomers with theTyr-19-phosphorylated form existing as a monomer or dimer, and theTyr-27-form as a monomer only. Interacts (tyrosine phosphorylatedform) with the SH2 domain-containing proteins, RASA1, NCK1 and SRC.Interacts (tyrosine phosphorylated form) with INSR, the interaction(Tyr-27-phosphorylated form) is increased on insulin stimulation.Interacts (Tyr-19 phosphorylated form) with MAPK1 (phosphorylatedform); the interaction, promoted by insulin, leads to nuclearlocation and MAPK1 activation. Interacts with STAT3; theinteraction is increased on insulin-induced tyrosinephosphorylation leading to STAT activation (By similarity). **Subcellular Location:** Nucleus. Cytoplasm. Golgi apparatusmembrane; Peripheral membrane protein. Cell membrane; Peripheralmembrane protein. Membrane, caveola; Peripheral membrane protein.Note=Potential hairpin-like structure in the membrane. Membraneprotein of caveolae. Tyr-19-phosphorylated form is enriched atsites of cell-cell contact and is translocated to the nucleus incomplex with MAPK1 in response to insulin (By similarity).Tyr-27-phosphorylated form is located both in the cytoplasm andplasma membrane. CAV1-mediated Ser-23-phosphorylated form locatesto the plasma membrane. Ser-36-phosphorylated form resides inintracellular compartments. **Tissue Specificity:** Expressed in endothelial cells, smooth musclecells, skeletal myoblasts and fibroblasts. **Post-translational modifications:** Phosphorylated on serine and tyrosine residues. CAV1 promotesphosphorylation on Ser-23 which then targets the complex to theplasma membrane, lipid rafts and caveolae. Phosphorylation onSer-36 appears to modulate mitosis in endothelial cells (Bysimilarity). Phosphorylation on both Tyr-19 and Tyr-27 is requiredfor insulin-

induced 'Ser-727' phosphorylation of STAT3 and itsactivation. Phosphorylation on Tyr-19 is required forinsulin-induced phosphorylation of MAPK1 and DNA binding of STAT3.Tyrosine phosphorylation is induced by both EGF and insulin (Bysimilarity).

Similarity:
Belongs to the caveolin family.

SWISS:
Q9WVC3

Gene ID:
12390

Database links:

Entrez Gene: 858Human

Entrez Gene: 12390Mouse

Entrez Gene: 100362824Rat

Entrez Gene: 363425Rat

Omim: 601048Human

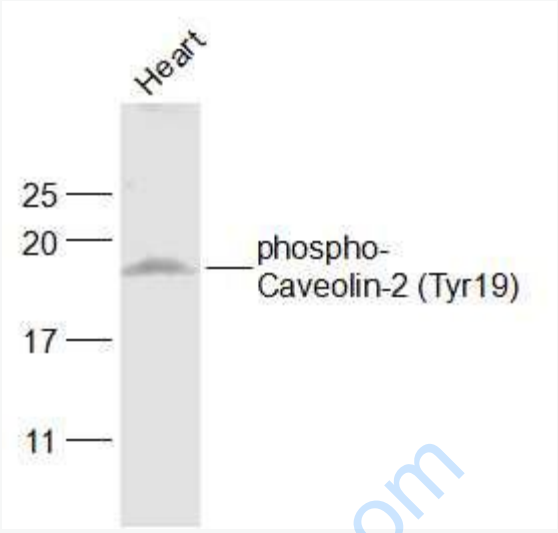
SwissProt: P51636Human

SwissProt: Q9WVC3Mouse

SwissProt: Q2IBC5Rat

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:	 Sample: Heart (Rat) Lysate at 40 ug Primary: Anti-phospho-Caveolin-2 (Tyr19) (SL7523R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 18 kD Observed band size: 18 kD