磷酸化细胞质膜微囊蛋白-2 抗体

产品货号： mlR7523

英文名称： phospho-Caveolin-2 (Tyr19)

中文名称： 磷酸化细胞质膜微囊蛋白-2 抗体

别　　名： 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.

产品类型： 磷酸化抗体

研究领域： 心血管　细胞生物　信号转导　细胞凋亡

抗体来源： Rabbit

克隆类型： Polyclonal

交叉反应　： Mouse, Rat,

产品应用： WB=1:500-2000 ELISA=1:500-1000 IHC-P=1:400-800 IHC-F=1:400-800 IF=1:100-500 （石蜡切片需做抗原修复）

not yet tested in other applications.

optimal dilutions/concentrations should be determined by the end user.

分 子 量： 18kDa

细胞定位： 细胞核 细胞浆 细胞膜

性　　状： Lyophilized or Liquid

浓　　度： 1mg/ml

免 疫 原： KLH conjugated Synthesised phosphopeptide derived from mouse Caveolin2 around the phosphorylation site of Tyr19.:DA(p-Y)SH

亚　　型： IgG

纯化方法： affinity purified by Protein A

储 存 液： 0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.

保存条件： 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

产品介绍 ： 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

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肿瘤发生发展过程中重要的抑制因子，Caveolae 是细胞膜内的特殊膜结构，参与包括细胞的分子运输、细胞粘附和信号转导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，与多种人类肿瘤发生发展相关的信号分子相互作用。Caveolin 在信号转导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 在信号转导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。

产品图片