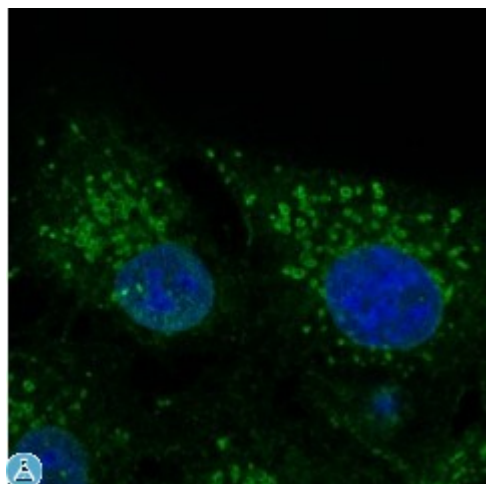


Anti-CAV2 antibody



Description

Goat polyclonal to Caveolin- 2 ,À caveolae marker. This scaffolding protein acts as an accessory protein in conjunction with CAV1 in targeting to lipid rafts and driving caveolae formation. It is involved in essential cellular functions, including cellular growth control, apoptosis, lipid metabolism and signal transduction. CAV2 might function as a tumor suppressor as well.

Model	STJ140020
Host	Goat
Reactivity	Avian, Bovine, Canine, Donkey, Feline, Goat, Guinea Pig, Hamster, Horse, Human, Mouse, Other, Porcine, Rabbit, Rat, Sheep, Simian
Applications	IF, IHC, WB
Immunogen	Recombinant peptide derived from within residues 50 aa to the N-terminus of human CAV2 produced in E. coli.
Immunogen Region	N-Term
Gene ID	858
Gene Symbol	CAV2
Dilution range	Western blot 1:500-1:2,000 Immunofluorescence 1:50-1:200 Immunohistochemistry (paraffin) 1:200-1:1,000 Immunohistochemistry (frozen) 1:200-1:1,000
Tissue Specificity	Expressed in endothelial cells, smooth muscle cells, skeletal myoblasts and fibroblasts. .
Purification	This antibody is epitope-affinity purified from goat antiserum.

Note	For research use only (RUO).
Protein Name	Caveolin-2
Molecular Weight	19 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	PBS, 20% glycerol and 0.05% sodium azide.
Concentration	2 mg/mL
Storage Instruction	Store at -20°, and avoid repeated freeze-thaw cycles.
Database Links	HGNC:1528OMIM:601048
Alternative Names	Caveolin-2
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 . {ECO:0000250, ECO:0000269 PubMed:15504032, ECO:0000269 PubMed:18081315}.
Cellular Localization	Nucleus. Cytoplasm. Golgi apparatus membrane. Peripheral membrane protein. Cell membrane. Peripheral membrane protein. Membrane, caveola. Peripheral membrane protein. 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 . 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. .
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 . 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 . {ECO:0000250}.