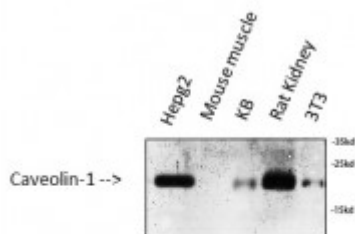


Anti-Caveolin-1 antibody



Western Blot (WB) analysis of 1. Hepg2 2. Mouse Muscle 3. KB 4. Rat Kidney 5. 3T3 using Caveolin-1 Polyclonal Antibody, (STJ92051)



Description

Caveolin-1 is a protein encoded by the CAV1 gene which is approximately 20,4 kDa. Caveolin-1 is localised to the Golgi apparatus membrane and cell membrane. It is involved in eNOS activation and regulation, focal adhesion and lipoprotein metabolism. It is a scaffolding protein that makes up the main component of the caveolae plasma membranes found in most cell types. The protein links integrin subunits to the tyrosine kinase FYN which is an initiating step in coupling integrins to the Ras-ERK pathway and promoting cell cycle progression. Caveolin-1 is expressed in the brain. Mutations in the CAV1 gene may result in pulmonary hypertension and lipodystrophy. STJ92051 was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen. This polyclonal antibody detects endogenous levels of Caveolin-1 protein.

Model	STJ92051
Host	Rabbit
Reactivity	Human, Mouse, Rat
Applications	ELISA, IF, WB
Immunogen	Synthesized peptide derived from human Caveolin-1
Immunogen Region	100-180 aa, C-terminal
Gene ID	857
Gene Symbol	CAV1
Dilution range	WB 1:500-1:2000IF 1:200-1:1000ELISA 1:5000
Specificity	Caveolin-1 Polyclonal Antibody detects endogenous levels of Caveolin-1

protein.

Tissue Specificity	Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Note	For Research Use Only (RUO).
Protein Name	Caveolin-1
Molecular Weight	25 kDa
Clonality	Polyclonal
Conjugation	Unconjugated
Isotype	IgG
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Concentration	1 mg/ml
Storage Instruction	Store at -20°C, and avoid repeat freeze-thaw cycles.
Database Links	HGNC:1527OMIM:601047
Alternative Names	Caveolin-1
Function	May act as a scaffolding protein within caveolar membranes. Interacts directly with G-protein alpha subunits and can functionally regulate their activity . Involved in the costimulatory signal essential for T-cell receptor (TCR)-mediated T-cell activation. Its binding to DPP4 induces T-cell proliferation and NF-kappa-B activation in a T-cell receptor/CD3-dependent manner. Recruits CTNNB1 to caveolar membranes and may regulate CTNNB1-mediated signaling through the Wnt pathway. Negatively regulates TGFB1-mediated activation of SMAD2/3 by mediating the internalization of TGFBR1 from membrane rafts leading to its subsequent degradation . Mediates the recruitment of CAVIN proteins (CAVIN1/2/3/4) to the caveolae .
Cellular Localization	Golgi apparatus membrane. Peripheral membrane protein. Cell membrane. Peripheral membrane protein. Membrane, caveola Golgi apparatus, trans-Golgi network. Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae.
Post-translational Modifications	The initiator methionine for isoform 2 is removed during or just after translation. The new N-terminal amino acid is then N-acetylated. Phosphorylated at Tyr-14 by ABL1 in response to oxidative stress.