

Anti-Phospho-CAV1-(Y14) Antibody



Description The scaffolding protein encoded by this gene is the main component of the

caveolae plasma membranes found in most cell types. The protein links integrin subunits to the tyrosine kinase FYN, an initiating step in coupling integrins to the Ras-ERK pathway and promoting cell cycle progression. The gene is a tumor suppressor gene candidate and a negative regulator of the Ras-p42/44 mitogen-activated kinase cascade. Caveolin 1 and caveolin 2 are located next to each other on chromosome 7 and express colocalizing proteins that form a stable hetero-oligomeric complex. Mutations in this gene have been associated with Berardinelli-Seip congenital

lipodystrophy. Alternatively spliced transcripts encode alpha and beta

isoforms of caveolin 1.

Model STJ116375

Host Rabbit

Reactivity Human, Mouse

Applications WB

Immunogen A synthetic phosphorylated peptide around Y14 of human CAV1

(NP_001744.2).

Gene ID <u>857</u>

Gene Symbol <u>CAV1</u>

Dilution range WB 1:1000 - 1:2000

Tissue Specificity Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level),

Expressed in the brain

Purification Affinity purification

Note For Research Use Only (RUO).

Protein Name Caveolin-1

Molecular Weight 20.472 kDa

Clonality Polyclonal

Conjugation Unconjugated

Isotype IgG

Formulation PBS with 0.02% sodium azide, 50% glycerol, pH7.3.

Storage Instruction Store at -20C. Avoid freeze / thaw cycles.

Database Links HGNC:1527OMIM:601047Reactome:R-HSA-163560

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,

Cellular Localization Golgi apparatus membrane

Post-translational Ubiquitinated, Undergo monoubiquitination and multi- and/or

Modifications polyubiquitination,

St John's Laboratory Ltd

F +44 (0)207 681 2580

T +44 (0)208 223 3081

W http://www.stjohnslabs.com/ E info@stjohnslabs.com