ARG51593
anti-Caveolin 1 phospho (Tyr14) antibody

Package: 100 µl, 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Caveolin 1 phospho (Tyr14)
Tested Reactivity	Hu, Ms, Rat
Tested Application	ICC/IF, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Caveolin 1
Species	Human
Immunogen	Peptide sequence around phosphorylation site of tyrosine 14 (H-L-Y(p)-T-V) derived from Human Caveolin 1.
Conjugation	Un-conjugated
Alternate Names	CGL3; LCCNS; PPH3; MSTP085; VIP21; BSCL3; Caveolin-1

Application Instructions

Application table

Application	Dilution
ICC/IF	1:100 - 1:200
WB	1:500 - 1:1000

Application Note: * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

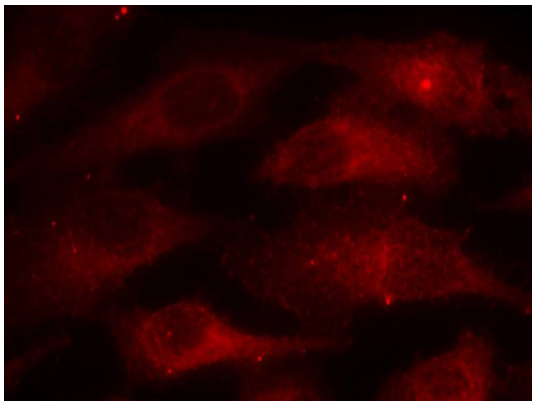
Form	Liquid
Purification	Antibodies were produced by immunizing rabbits with KLH-conjugated synthetic phosphopeptide. Antibodies were purified by affinity-chromatography using epitope-specific phosphopeptide. In addition, non-phospho specific antibodies were removed by chromatogramphy using non-phosphopeptide.
Buffer	PBS (without Mg2+ and Ca2+, pH 7.4), 150mM NaCl, 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

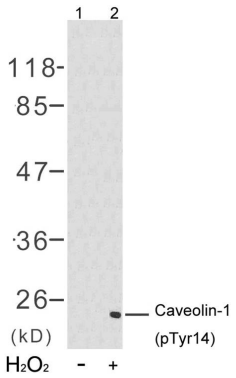
Database links	GeneID: 12389 Mouse GeneID: 857 Human Swiss-port # P49817 Mouse Swiss-port # Q03135 Human
Gene Symbol	CAV1
Gene Full Name	caveolin 1, caveolae protein, 22kDa
Background	The scaffolding protein encoded by Caveolin-1 is the main component of the caveolae plasma membranes found in most cell 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 MAP kinase cascade. CAV1 and CAV2 are located next to each other on chromosome 7 and express colocalizing proteins that form a stable hetero-oligomeric complex. By using alternative initiation codons in the same reading frame, two isoforms (alpha and beta) are encoded by a single transcript from this gene.
Function	May act as a scaffolding protein within caveolar membranes. Interacts directly with G-protein alpha subunits and can functionally regulate their activity (By similarity). 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. [UniProt]
Research Area	Endosome Marker antibody
Calculated Mw	20 kDa
PTM	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.

Images



ARG51593 anti-Caveolin 1 phospho (Tyr14) antibody ICC/IF image

Immunofluorescence: Methanol-fixed HeLa cells stained with ARG51593 anti-Caveolin 1 phospho (Tyr14) antibody.



ARG51593 anti-Caveolin 1 phospho (Tyr14) antibody WB image

Western blot: Extracts from 3T3 cells untreated (lane 1) or treated with H2O2 (lane 2) stained ARG51593 anti-Caveolin 1 phospho (Tyr14) antibody.