ARG57106
anti-Caveolin 1 antibody [4C1]

Package: 50 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [4C1] recognizes Caveolin 1
Tested Reactivity	Hu, Rat
Tested Application	ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	4C1
Isotype	IgG2b, kappa
Target Name	Caveolin 1
Species	Human
Immunogen	Recombinant fragment around aa. 1-104 of Human Caveolin 1.
Conjugation	Un-conjugated
Alternate Names	CGL3; LCCNS; PPH3; MSTP085; VIP21; BSCL3; Caveolin-1

Application Instructions

Application table

Application	Dilution
ICC/IF	Assay-dependent
WB	1:250 - 1:1000

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

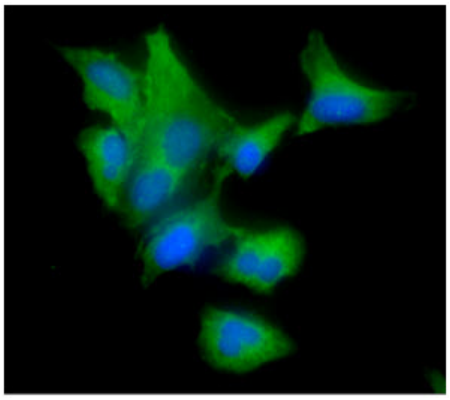
Properties

Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 10% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	10% 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: 857 Human Swiss-port # Q03135 Human
Gene Symbol	CAV1
Gene Full Name	caveolin 1, caveolae protein, 22kDa
Background	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.[provided by RefSeq, Mar 2010]
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.

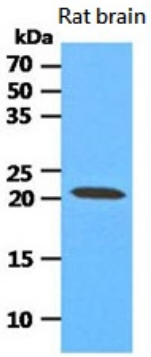
Images



ARG57106 anti-Caveolin 1 antibody [4C1] ICC/IF image

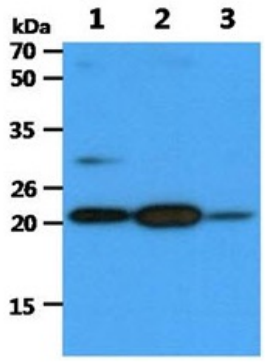
Immunofluorescence: A549 cells line stained with ARG57106 anti-Caveolin 1 antibody [4C1] at 1:100 (green).

DAPI (Blue) for nucleus staining.



ARG57106 anti-Caveolin 1 antibody [4C1] WB image

Western blot: 40 µg of Rat brain lysate stained with ARG57106 anti-Caveolin 1 antibody [4C1] at 1:1000.



ARG57106 anti-Caveolin 1 antibody [4C1] WB image

Western blot: 40 µg of 1) Mouse brain, 2) Mouse heart, and 3) A431 cell lysate stained with ARG57106 anti-Caveolin 1 antibody [4C1] at 1:1000.