



Caveolin-1 (phospho Tyr14) Polyclonal Antibody

Catalog No	YP-Ab-03510
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;ELISA
Gene Name	CAV1
Immunogen	The antiserum was produced against synthesized peptide derived from human Caveolin-1 around the phosphorylation site of Tyr14. AA range:5-54
Specificity	Phospho-Caveolin-1 (Y14) Polyclonal Antibody detects endogenous levels of Caveolin-1 protein only when phosphorylated at Y14.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	Western Blot: 1/500 - 1/2000. ELISA: 1/20000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	Caveolin 1;CAV1;MSTP085;CGL3;CAV;Caveolin-1
Observed Band	20kD
Calculated Molecular Weight	20kD
Cell Pathway	Golgi apparatus membrane; Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola ; Peripheral membrane protein. Membrane raft . Golgi apparatus, trans-Golgi network . Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae.
Tissue Specificity	Skeletal muscle, liver, stomach, lung, kidney and heart (at protein level). Expressed in the brain.
Function	disease:Defects in CAV1 are the cause of congenital generalized lipodystrophy type 3 (CGL3) [MIM:612526]; also called Berardinelli-Seip congenital lipodystrophy type 3 (BSCL3). Congenital generalized lipodystrophies are autosomal recessive disorders characterized by a near absence of adipose tissue, extreme insulin resistance, hypertriglyceridemia, hepatic steatosis and early onset of diabetes.,function:May act as a scaffolding protein within caveolar



membranes. Interacts directly with G-protein alpha subunits and can functionally regulate their activity.,online information:Caveolin entry,PTM:The initiator methionine for isoform Beta is removed during or just after translation. The new N-terminal amino acid is then N-acetylated.,similarity:Belongs to the caveolin family.,subcellular location:Potential hairpin-like structure in the membrane. Membrane protein of caveolae.,subunit:Homooligo

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],

matters needing attention

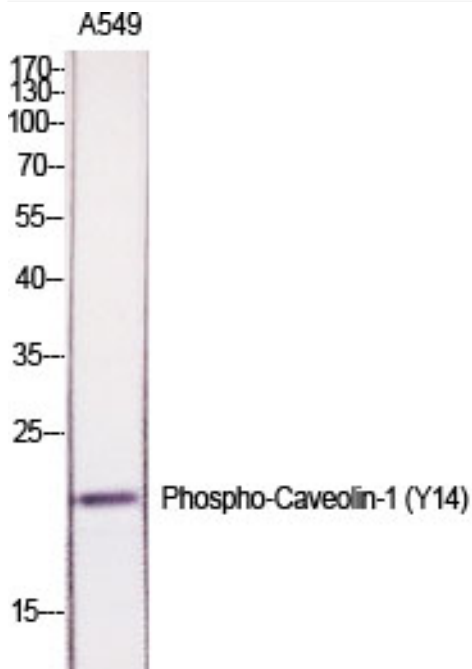
Avoid repeated freezing and thawing!

Usage suggestions

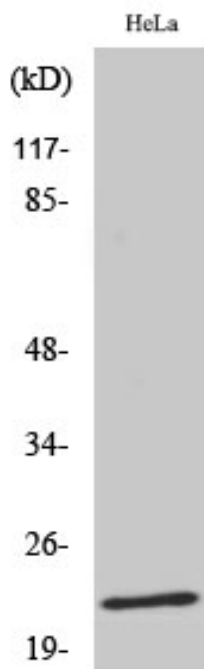
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



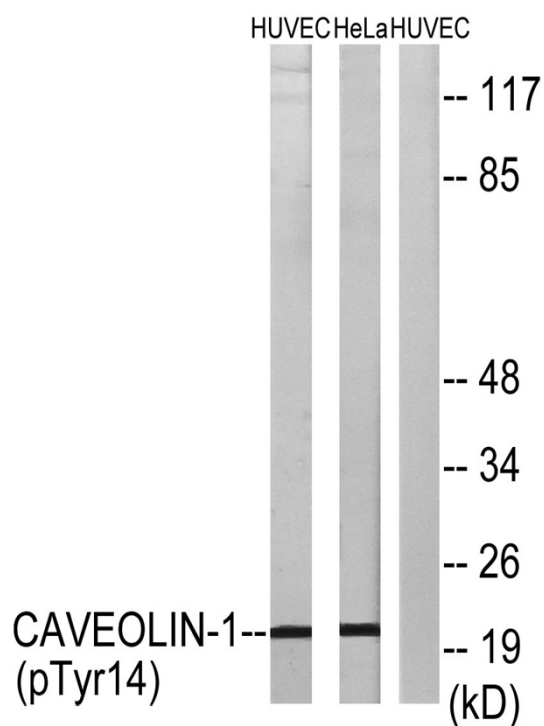
Products Images



Western Blot analysis of various cells using
Phospho-Caveolin-1 (Y14) Polyclonal Antibody diluted
at 1:1000



Western Blot analysis of HeLa cells using
Phospho-Caveolin-1 (Y14) Polyclonal Antibody diluted
at 1:1000



Western blot analysis of lysates from HUVEC cells treated with PMA 125ng/ml 30' and HeLa cells treated with LPS 100ng/ml 30', using Caveolin-1 (Phospho-Tyr14) Antibody. The lane on the right is blocked with the phospho peptide.