

Caveolin-1 Rabbit pAb

Caveolin-1 Rabbit pAb
Catalog # AP52245

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q03135
Reactivity	Human, Mouse, Rat
Predicted	Dog, Pig, Horse, Rabbit, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	20 KDa
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human Caveolin-1
Epitope Specificity	2-120/178
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Golgi apparatus membrane;Peripheral membrane protein. Cell membrane; Peripheral membrane protein. Membrane, caveola; Peripheral membrane protein. Membrane raft. Note=Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae.
SIMILARITY	Belongs to the caveolin family.
SUBUNIT	Homooligomer. Interacts with GLIPR2, NOSTRIN, SNAP25 and syntaxin. Interacts with rotavirus A NSP4. Interacts (via the N-terminus) with DPP4; the interaction is direct. Interacts with CTNNB1, CDH1 and JUP. Interacts with BMX and BTK.
Post-translational modifications	The initiator methionine for isoform Beta 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.
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.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	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 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. [provided by RefSeq].

Additional Information

Other Names	Caveolin-1, CAV1, CAV
Target/Specificity	Expressed in muscle and lung, less so in liver, brain and kidney.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

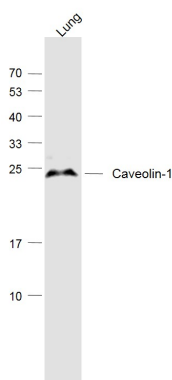
Background

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 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. [provided by RefSeq].

References

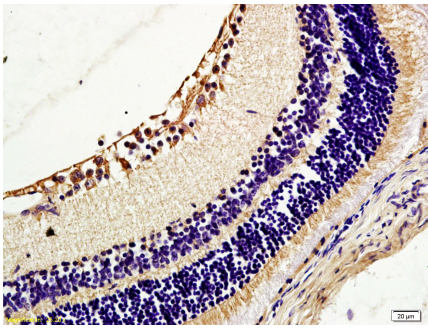
Glenney J.R. Jr., et al. *FEBS Lett.* 314:45-48(1992).
Hurlstone A.F., et al. *Oncogene* 18:1881-1890(1999).
Engelman J.A., et al. *FEBS Lett.* 448:221-230(1999).
Kalnine N., et al. Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Vainonen J.P., et al. *Biochem. Biophys. Res. Commun.* 320:480-486(2004).

Images



Sample:
Lung (Mouse) Lysate at 40 ug
Primary: Anti-Caveolin-1 (AP52245) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 20 kD
Observed band size: 20 kD

Tissue/cell: mouse retina tissue; 4%
Paraformaldehyde-fixed and paraffin-embedded;



Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min; Incubation: Anti-Caveolin-1 Polyclonal Antibody, Unconjugated(AP52245) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.