

Datasheet for ABIN967951

anti-Caveolin-1 antibody (AA 1-178)**4** Images**5** Publications[Go to Product page](#)

Overview

Quantity:	150 µg
Target:	Caveolin-1 (CAV1)
Binding Specificity:	AA 1-178
Reactivity:	Human, Rat, Mouse, Dog, Chicken
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This Caveolin-1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF), Immunoprecipitation (IP)

Product Details

Immunogen:	RSV-CEF Caveolin aa. 1-178
Clone:	2297-Caveolin 1
Isotype:	IgG1
Characteristics:	<ol style="list-style-type: none">1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.2. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.3. Source of all serum proteins is from USDA inspected abattoirs located in the United States.4. Please refer to us for technical protocols.
Purification:	The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity

Product Details

chromatography.

Target Details

Target:	Caveolin-1 (CAV1)
Alternative Name:	Caveolin 1 (CAV1 Products)
Background:	Identified as a tyrosine phosphorylated protein in Rous sarcoma virus-transformed chick embryo fibroblasts (CEF), caveolin is now known to be ubiquitously expressed. Caveolin (also known as VIP21) localizes to non-clathrin membrane invaginations (caveolae) on the inner surface of the plasma membrane. This transmembrane protein plays a structural role in these specializations. Caveolin is also present at the trans-Golgi network (TGN) and similar quantities are found in apically and basolaterally destined transport vesicles. Caveolin is part of a complex containing glycosylphosphatidylinositol (GPI)-linked molecules and cytoplasmic signaling proteins. Caveolin is a transmembrane adaptor molecule that can simultaneously recognize GPI-linked proteins and interact with downstream cytoplasmic signaling molecules, such as c-yes, Annexin II, and hetero-trimeric G proteins. Caveolin-1 can generate two forms, alpha and beta, due to alternate splicing of the mRNA. The alpha isoform has been reported to be observed at 24 kD and the beta isoform at 21 kD. Caveolin-1 forms large lipid-binding homo-oligomers which are believed to play a role in caveolae formation. It may also function as a scaffolding protein which concentrates and organizes signaling molecules, a role supported by the fact that caveolin-1 interacts directly with inactive Ras and G-protein alpha subunits. This antibody is routinely tested by western blot analysis.
Molecular Weight:	21-24 kDa
Pathways:	Maintenance of Protein Location , Signaling Events mediated by VEGFR1 and VEGFR2 , Negative Regulation of Transporter Activity , VEGFR1 Specific Signals

Application Details

Comment:	Related Products: ABIN968536, ABIN967389
Restrictions:	For Research Use only

Handling

Format:	Liquid
Concentration:	250 µg/mL

Handling

Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤ 0.09 % sodium azide.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C
Storage Comment:	Store undiluted at -20°C.

Publications

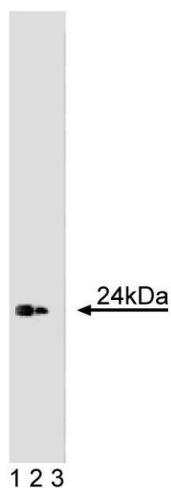
Product cited in: Woodman, Park, Cohen, Cheung, Chandra, Shirani, Tang, Jelicks, Kitsis, Christ, Factor, Tanowitz, Lisanti: "Caveolin-3 knock-out mice develop a progressive cardiomyopathy and show hyperactivation of the p42/44 MAPK cascade." in: **The Journal of biological chemistry**, Vol. 277, Issue 41, pp. 38988-97, (2002) ([PubMed](#)).

Ushio-Fukai, Hilenski, Santanam, Becker, Ma, Griendling, Alexander: "Cholesterol depletion inhibits epidermal growth factor receptor transactivation by angiotensin II in vascular smooth muscle cells: role of cholesterol-rich microdomains and focal adhesions in angiotensin II signaling." in: **The Journal of biological chemistry**, Vol. 276, Issue 51, pp. 48269-75, (2001) ([PubMed](#)).

Galbiati, Volonte, Brown, Weinstein, Ben-Zeev, Pestell, Lisanti: "Caveolin-1 expression inhibits Wnt/beta-catenin/Lef-1 signaling by recruiting beta-catenin to caveolae membrane domains." in: **The Journal of biological chemistry**, Vol. 275, Issue 30, pp. 23368-77, (2000) ([PubMed](#)).

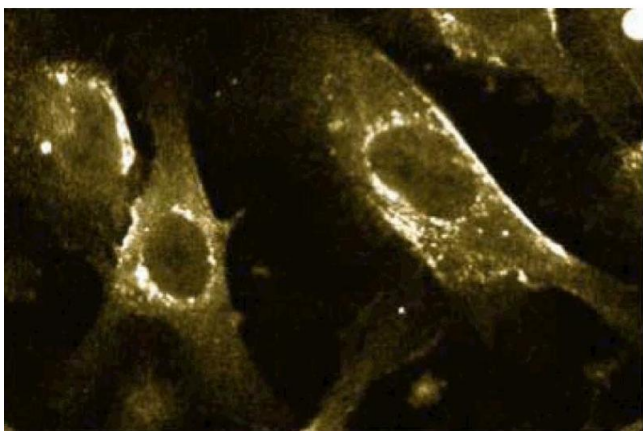
Breton, Lisanti, Tyszkowski, McLaughlin, Brown: "Basolateral distribution of caveolin-1 in the kidney. Absence from H⁺-atpase-coated endocytic vesicles in intercalated cells." in: **The journal of histochemistry and cytochemistry : official journal of the Histochemistry Society**, Vol. 46, Issue 2, pp. 205-14, (1998) ([PubMed](#)).

Conrad, Smart, Ying, Anderson, Bloom: "Caveolin cycles between plasma membrane caveolae and the Golgi complex by microtubule-dependent and microtubule-independent steps." in: **The Journal of cell biology**, Vol. 131, Issue 6 Pt 1, pp. 1421-33, (1996) ([PubMed](#)).



Western Blotting

Image 1. Western blot analysis of Caveolin 1 on a human endothelial cell lysate. Lane 1: 1:1000, lane 2: 1:2000, lane 3: 1:4000 dilution of the mouse anti-caveolin 1 antibody.



Immunofluorescence

Image 2. Immunofluorescence with the mouse anti-caveolin 1 antibody on human endothelial cells.

Image 3.



Please check the [product details page](#) for more images. Overall 4 images are available for ABIN967951.