

Anti-Caveolin-1 antibody - Caveolae Marker ab18199

敲除 验证

★★★★★ [9 Abreviews](#) [27 References](#) [5 图像](#)

概述

产品名称	Anti-Caveolin-1抗体- Caveolae Marker
描述	兔多克隆抗体to Caveolin-1 - Caveolae Marker
宿主	Rabbit
经测试应用	适用于: IP, WB 不适用于: ICC/IF
种属反应性	与反应: Mouse, Rat, Human, Recombinant fragment 预测可用于: Cow, Dog, Pig 
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
常规说明	<p>The Life Science industry has been in the grips of a reproducibility crisis for a number of years. Abcam is leading the way in addressing this with our range of recombinant monoclonal antibodies and knockout edited cell lines for gold-standard validation. Please check that this product meets your needs before purchasing.</p> <p>If you have any questions, special requirements or concerns, please send us an inquiry and/or contact our Support team ahead of purchase. Recommended alternatives for this product can be found below, along with publications, customer reviews and Q&As</p>

性能

形式	Liquid
存放说明	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
存储溶液	pH: 7.40 Preservative: 0.02% Sodium azide Constituents: PBS, 1% BSA Batches of this product that have a concentration < 1mg/ml may have BSA added as a stabilising agent. If you would like information about the formulation of a specific lot, please contact our scientific support team who will be happy to help.
纯度	Immunogen affinity purified
克隆	多克隆

同种型

IgG

应用

The Abpromise guarantee **Abpromise™**承诺保证使用ab18199于以下的经测试应用

“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IP		Use at an assay dependent concentration.
WB	★★★★★ (5)	Use a concentration of 1 µg/ml. Detects a band of approximately 20 kDa (predicted molecular weight: 20 kDa).

应用说明

Is unsuitable for ICC/IF.

靶标

功能

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.

组织特异性

Expressed in muscle and lung, less so in liver, brain and kidney.

疾病相关

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.

序列相似性

Belongs to the caveolin family.

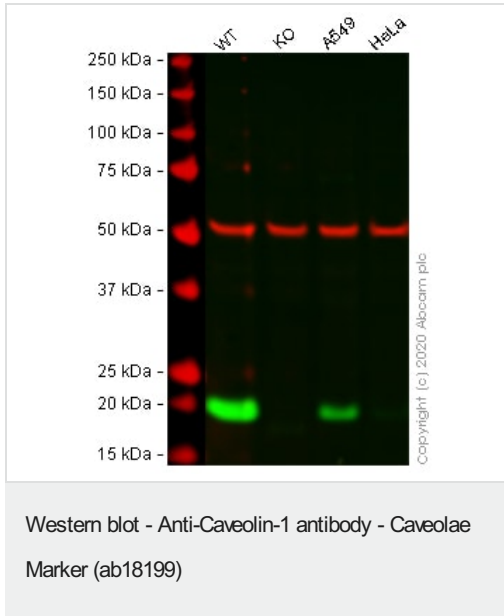
翻译后修饰

The initiator methionine for isoform Beta is removed during or just after translation. The new N-terminal amino acid is then N-acetylated.

细胞定位

Golgi apparatus membrane. Cell membrane. Membrane > caveola. Membrane raft. Colocalized with DPP4 in membrane rafts. Potential hairpin-like structure in the membrane. Membrane protein of caveolae.

图片



All lanes : Anti-Caveolin-1 antibody - Caveolae Marker (ab18199) at 1 µg/ml

Lane 1 : Wild-type A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 2 : CAV1 knockout A-431 (Human epidermoid carcinoma cell line) whole cell lysate

Lane 3 : A549 (Human lung carcinoma cell line) whole cell lysate

Lane 4 : HeLa (Human epithelial cell line from cervix adenocarcinoma) whole cell lysate

Lysates/proteins at 20 µg per lane.

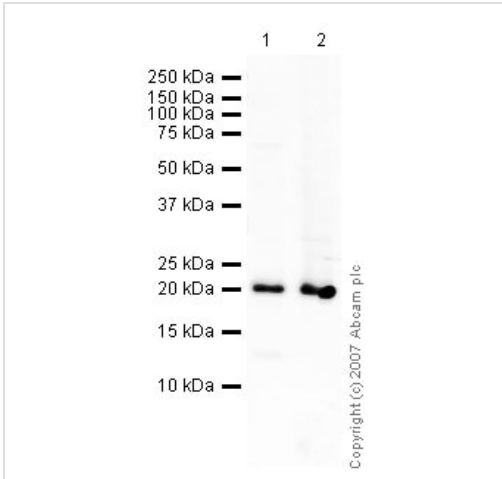
Performed under reducing conditions.

Predicted band size: 20 kDa

Observed band size: 21-24 kDa

Lanes 1 - 4: Merged signal (red and green). Green - ab18199 observed at 21-24 kDa. Red - loading control, **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) observed at 55kDa.

ab18199 was shown to react with Caveolin-1 in wild-type A431 cells in western blot. Loss of signal was observed when CAV1 knockout sample was used. Wild-type and CAV1 knockout A431 cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3% milk in TBS-T (0.1% Tween®) before incubation with ab18199 and **ab7291** (Mouse anti-Alpha Tubulin [DM1A]) overnight at 4°C at 1 µg/ml and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Rabbit IgG H&L (IRDye® 800CW) preabsorbed (**ab216773**) and Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibodies at 1 in 20000 dilution for 1 hour at room temperature before imaging.



Western blot - Anti-Caveolin-1 antibody - Caveolae Marker (ab18199)

All lanes : Anti-Caveolin-1 antibody - Caveolae Marker (ab18199) at 1 µg/ml

Lane 1 : Mouse Heart Lysate

Lane 2 : Human Heart Lysate

Lysates/proteins at 10 µg per lane.

Secondary

All lanes : Alexa Fluor Goat polyclonal to Rabbit IgG (700) at 1/5000 dilution

Performed under reducing conditions.

Predicted band size: 20 kDa

Observed band size: 20 kDa



Western blot - Anti-Caveolin-1 antibody - Caveolae Marker (ab18199)

All lanes : Anti-Caveolin-1 antibody - Caveolae Marker (ab18199) at 1 µg/ml

Lane 1 : NIH/3T3 whole cell lysate (**ab7179**)

Lane 2 : MEF1 (Mouse embryonic fibroblast cell line) Whole Cell Lysate

Lane 3 : Heart (Mouse) Tissue Lysate

Lane 4 : Heart (Rat) Tissue Lysate

Lysates/proteins at 10 µg per lane.

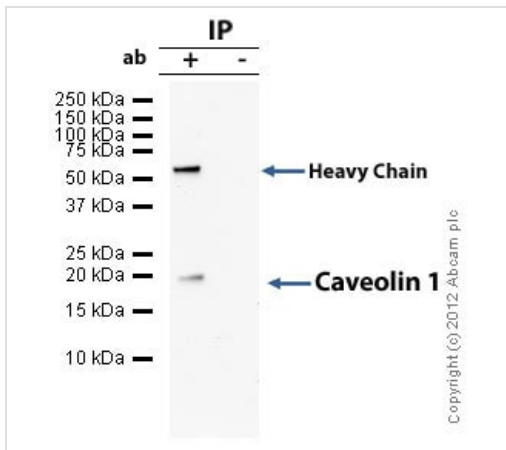
Secondary

All lanes : IRDye 680 Conjugated Goat Anti-Rabbit IgG (H+L) at 1/10000 dilution

Performed under reducing conditions.

Predicted band size: 20 kDa

Observed band size: 20 kDa



Immunoprecipitation - Anti-Caveolin-1 antibody - Caveolae Marker (ab18199)

Caveolin 1 - Caveolae Marker was immunoprecipitated using 0.5mg Mouse Heart whole tissue lysate, 5µg of Rabbit polyclonal to Caveolin 1 and 50µl of protein G magnetic beads (+). No antibody was added to the control (-).

The antibody was incubated under agitation with Protein G beads for 10min, Mouse Heart whole tissue lysate lysate diluted in RIPA buffer was added to each sample and incubated for a further 10min under agitation.

Proteins were eluted by addition of 40µl SDS loading buffer and incubated for 10min at 70°C; 10µl of each sample was separated on a SDS PAGE gel, transferred to a nitrocellulose membrane, blocked with 5% BSA and probed with ab18199.

Secondary: Clean blot (HRP conjugate) at 1/1000 dilution.

Band: 20kDa: Caveolin 1 - Caveolae Marker.



Western blot - Anti-Caveolin-1 antibody - Caveolae Marker (ab18199)

Anti-Caveolin-1 antibody - Caveolae Marker (ab18199) at 1 µg/ml + Recombinant Human Caveolin-1 protein ([ab114170](#)) at 0.01 µg

Secondary

Goat Anti-Rabbit IgG H&L (HRP) preadsorbed ([ab97080](#)) at 1/5000 dilution

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 20 kDa

Exposure time: 1 minute

ab18199 recognizes the full length tagged recombinant Caveolin 1 protein ([ab114170](#)) which has an expected molecular weight of 46 kDa.

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