Product datasheet

HRP Anti-Caveolin-1 antibody [E249] - Caveolae Marker ab193893

敲除验证 重组 RabMAb

4 图像

概述

产品名称	HRP Anti-Caveolin-1抗体[E249] - Caveolae Marker
描述	HRP兔单克隆抗体[E249] to Caveolin-1 - Caveolae Marker
宿主	Rabbit
偶联物	HRP
经测试应用	**适用于:** IHC-P, WB
种属反应性	**与反应:** Human
免疫原	Synthetic peptide. This information is proprietary to Abcam and/or its suppliers.
阳性对照	WB: HeLa, A549 and A431 whole cell lysate. IHC-P: FFPE human lung tissue sections.
常规说明	Our RabMAb® technology is a patented hybridoma-based technology for making rabbit monoclonal antibodies. For details on our patents, please refer to **RabMAb® patents**.

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. Avoid freeze / thaw cycle. Store In the Dark.
存储溶液	pH: 7.40 Preservative: 0.1% Proclin 300 Solution Constituents: 30% Glycerol (glycerin, glycerine), 1% BSA, PBS
纯度	Protein A purified
克隆	单克隆
克隆编号	E249
同种型	IgG

应用

The Abpromise guarantee	**Abpromise™承诺保证使用ab193893于以下的经测试应用**

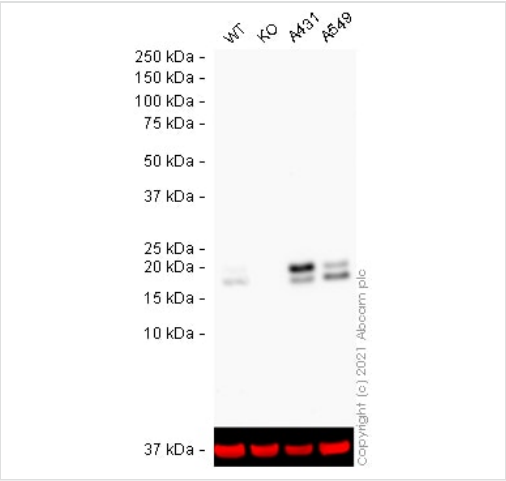
“应用说明”部分 下显示的仅为推荐的起始稀释度;实际最佳的稀释度/浓度应由使用者检定。

应用	Ab评论	说明
IHC-P		1/500. Perform heat mediated antigen retrieval with citrate buffer pH 6 before commencing with IHC staining protocol.
WB		1/5000. Detects a band of approximately 20 kDa (predicted molecular weight: 20 kDa).

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



Western blot - HRP Anti-Caveolin-1 antibody [E249] - Caveolae Marker (ab193893)

All lanes : HRP Anti-Caveolin-1 antibody [E249] - Caveolae Marker (ab193893) at 1/5000 dilution

Lane 1 : Wild-type HeLa cell lysate
Lane 2 : CAV1 knockout HeLa cell lysate
Lane 3 : A431 cell lysate
Lane 4 : A549 cell lysate

Lysates/proteins at 20 µg per lane.

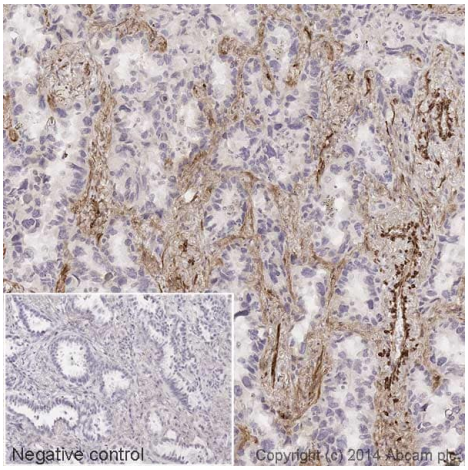
Performed under reducing conditions.

Predicted band size: 20 kDa
Observed band size: 20 kDa

Exposure time: 90 seconds

Lanes 1 - 4: Merged signal (red and green). Green - ab193893 observed at 20 kDa. Red - loading control **ab8245** (Mouse anti-GAPDH antibody [6C5]) observed at 37 kDa.

ab193893 was shown to react with Caveolin-1 in wild-type HeLa cells in Western blot with loss of signal observed in CAV1 knockout cell line **ab255371** (CAV1 knockout cell lysate **ab263806**). Wild-type HeLa and CAV1 knockout cell lysates were subjected to SDS-PAGE. Membranes were blocked in 3 % milk in TBS-T (0.1 % Tween®) before incubation with ab193893 and **ab8245** (Mouse anti-GAPDH antibody [6C5]) overnight at 4 °C at a 1 in 5000 dilution and a 1 in 20000 dilution respectively. Blots were incubated with Goat anti-Mouse IgG H&L (IRDye® 680RD) preabsorbed (**ab216776**) secondary antibody at 1 in 20000 dilution for 1 h at room temperature. Blots were developed with Optiblot ECL reagent (**ab133456**) before imaging.

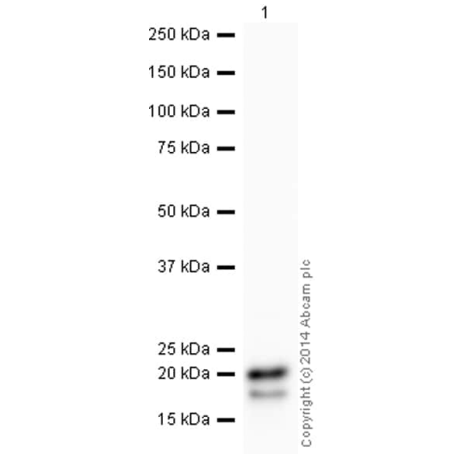


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - HRP Anti-Caveolin-1 antibody [E249] - Caveolae Marker (ab193893)

IHC image of Caveolin-1 staining in a section of formalin-fixed paraffin-embedded human normal lung*. The section was pre-treated using pressure cooker heat mediated antigen retrieval with sodium citrate buffer (pH6) for 30mins, and incubated overnight at +4°C with ab193893 at a working dilution of 1/500. DAB was used as the chromogen (**ab103723**), diluted 1/100 and incubated for 10min at room temperature. The section was counterstained with haematoxylin and mounted with DPX. The inset negative control image is taken from an identical assay without primary antibody.

For other IHC staining systems (automated and non-automated) customers should optimize variable parameters such as antigen retrieval conditions, primary antibody concentration and antibody incubation times.

*Tissue obtained from the Human Research Tissue Bank, supported by the NIHR Cambridge Biomedical Research Centre



Western blot - HRP Anti-Caveolin-1 antibody [E249] - Caveolae Marker (ab193893)

HRP Anti-Caveolin-1 antibody [E249] - Caveolae Marker (ab193893) at 1/5000 dilution + A431 (Human epithelial carcinoma cell line) Whole Cell Lysate at 10 µg

Developed using the ECL technique.

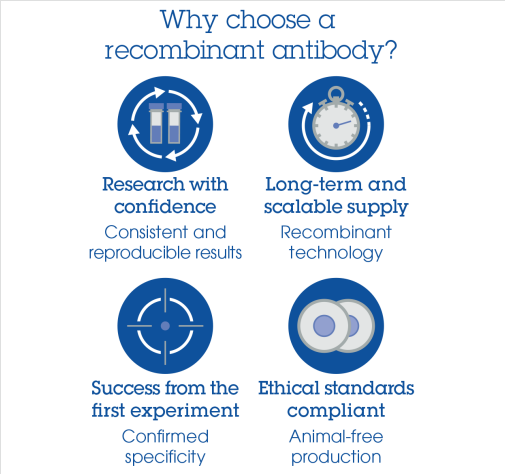
Performed under reducing conditions.

Predicted band size: 20 kDa
Observed band size: 20 kDa
Additional bands at: 17 kDa (possible isoform)

Exposure time: 10 seconds

This blot was produced using a 4-12% Bis-tris gel under the MES buffer system. The gel was run at 200V for 35 minutes before being transferred onto a Nitrocellulose membrane at 30V for 70 minutes.

The membrane was then blocked for an hour using 2% Bovine Serum Albumin before being incubated with ab193893 overnight at 4°C. Antibody binding was visualised using ECL development solution **ab133406**.



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