abcam

Product datasheet

Anti-Caveolin-1 antibody - N-terminal ab211503

1 References 3 Images

Overview

Product name	Anti-Caveolin-1 antibody - N-terminal
Description	Goat polyclonal to Caveolin-1 - N-terminal
Host species	Goat
Tested applications	**Suitable for:** IHC-P, WB, ICC/IF
Species reactivity	**Reacts with:** Mouse, Human **Predicted to work with:** Monkey
Immunogen	Recombinant fragment within Human Caveolin-1 aa 1-100 (N terminal). The exact sequence is proprietary. (NP_001744.2). Database link: **Q03135**
Positive control	HaCat, MDCK and 3T3 cell lysates; Human heart tissue; Hepa1-6 cells.
General notes	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. 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

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C long term. Avoid freeze / thaw cycle.
Storage buffer	pH: 7.4 Preservative: 0.05% Sodium azide Constituents: 20% Glycerol (glycerin, glycerine), 79% PBS
Purity	Immunogen affinity purified
Clonality	Polyclonal
Isotype	IgG

Applications

The Abpromise guarantee Our **Abpromise guarantee** covers the use of ab211503 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
IHC-P		Use a concentration of 5 µg/ml. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		1/500 - 1/2000. Detects a band of approximately 25 kDa (predicted molecular weight: 20 kDa).
ICC/IF		1/25 - 1/250.

Target

Function 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.

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

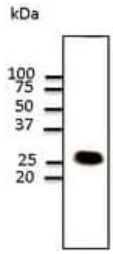
Involvement in disease Defects in CAV1 are the cause of congenital generalized lipodystrophy type 3 (CGL3) [MIM:612526]; also called Berardinelli-Seip congenital lipodystrophy type 3 (BSCL3). Congenital generalized lipodystrophies are autosomal recessive disorders characterized by a near absence of adipose tissue, extreme insulin resistance, hypertriglyceridemia, hepatic steatosis and early onset of diabetes.

Sequence similarities Belongs to the caveolin family.

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.

Cellular localization 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.

Images



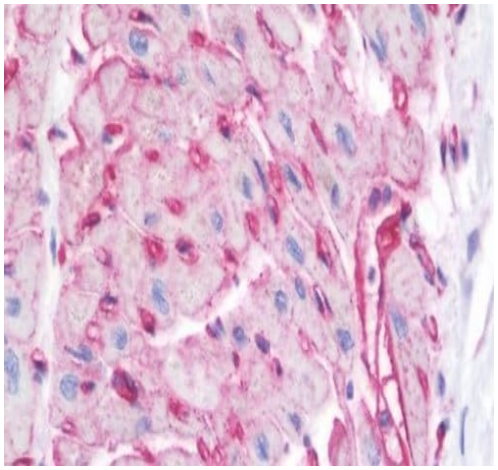
Western blot - Anti-Caveolin-1 antibody - N-terminal (ab211503)

Anti-Caveolin-1 antibody - N-terminal (ab211503) at 1/1000 dilution + HaCat cell lysate at 100 µg

Secondary

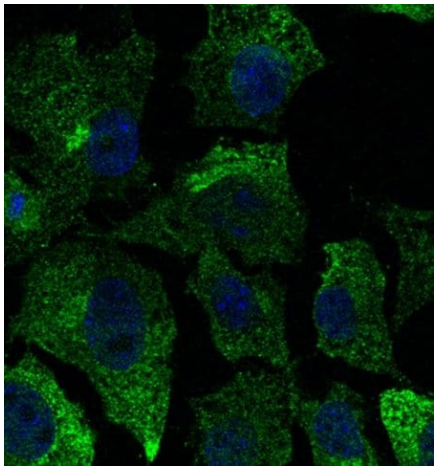
Rabbit polyclonal to goat IgG (HRP) at 1/10000 dilution

Predicted band size: 20 kDa



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Caveolin-1 antibody - N-terminal (ab211503)

Immunohistochemical analysis of formalin-fixed, paraffin-embedded Human heart tissue labeling Caveolin-1 with ab211503 at 5 µg/ml.



Immunocytochemistry/ Immunofluorescence - Anti-Caveolin-1 antibody - N-terminal (ab211503)

Immunofluorescent analysis of 4% PFA-fixed Hepa1-6 cells labeling Caveolin-1 with ab211503 at 1/50 dilution.

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