SANTA CRUZ BIOTECHNOLOGY, INC.

caveolin-1 (C20B): sc-135860

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Caveolae (also known as plasmalemmal vesicles) are 50-100 nM flask-shaped membranes that represent a subcompartment of the plasma membrane. On the basis of morphological studies, caveolae have been implicated to function in the transcytosis of various macromolecules (including LDL) across capillary endothelial cells, the uptake of small molecules via potocytosis and the compartmentalization of certain signaling molecules, including G protein-coupled receptors. Three proteins, caveolin-1, caveolin-2 and caveolin-3, have been identified as principal components of caveolae. Two forms of caveolin-1, designated α and β, share a distinct but overlapping cellular distribution and differ by an amino-terminal 31 amino acid sequence which is absent from the β isoform. Caveolin-1 shares 31% identity with caveolin-2 and 65% identity with caveolin-3 at the amino acid level. Functionally, the three proteins differ in their interactions with heterotrimeric G protein isoforms.

REFERENCES

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SOURCE

caveolin-1 (C20B) is a mouse monoclonal antibody raised against full length caveolin-1 derived from RSV transformed chick embryo fibroblasts.

PRODUCT

Each vial contains 50 µg IgG_1 in 500 µl of PBS with < 0.1% sodium azide, 0.1% gelatin, 20% glycerol and 0.04% stabilizer protein.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

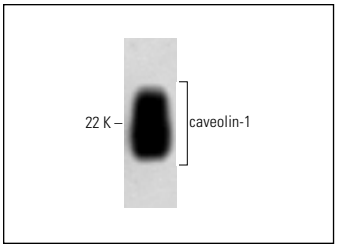
APPLICATIONS

caveolin-1 (C20B) is recommended for detection of caveolin-1 of avian origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of caveolin-1: 22 kDa.

Positive Controls: SL-29 cell lysate: sc-24777.

DATA



caveolin-1 (C20B): sc-135860. Western blot analysis of caveolin-1 expression in SL-29 whole cell lysate.

SELECT PRODUCT CITATIONS

1. Liu, J., et al. 2012. Matrix metalloproteinase-2-mediated occludin degradation and caveolin-1-mediated claudin-5 redistribution contribute to blood-brain barrier damage in early ischemic stroke stage. J. Neurosci. 32: 3044-3057.
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RESEARCH USE

For research use only, not for use in diagnostic procedures. Not for resale.