

## Product datasheet for **TA301445**

### Caveolin 1 (CAV1) Mouse Monoclonal Antibody [Clone ID: 7C8]

#### Product data:

Product Type:	Primary Antibodies
Clone Name:	7C8
Applications:	FC, ICC/IF, IHC, Immunoblotting, IP, WB
Recommended Dilution:	Immunohistochemistry: 1:100-1:300, Immunohistochemistry-Paraffin: 1:100-1:300, Western Blot: 1:1000-1:4000, Immunocytochemistry/ Immunofluorescence: 1:200, Immunohistochemistry-Frozen, Immunoblotting, Flow Cytometry: 1 ug per million cells, Immunoprecipitation: 1-2 ug / 500 ug of protein
Reactivity:	Human, Rat, Mouse
Host:	Mouse
Isotype:	IgG2b
Clonality:	Monoclonal
Immunogen:	Glut 4 vesicles.
Formulation:	Tris-glycine and 150mM NaCl containing 0.05% sodium azide. and Sodium Azide
Purification:	protein A purified
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	caveolin 1
Database Link:	<a href="#">NP_001744</a> <a href="#">Entrez Gene 12389 MouseEntrez Gene 25404 RatEntrez Gene 857 Human Q03135</a>



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**Background:**

Caveolae are specialized domains of the plasma membrane that are implicated in the sequestration of a variety of lipid and protein molecules. It has been suggested that these important cellular organelles have a pivotal role in such diverse biochemical processes as lipid metabolism, growth regulation, signal transduction, and apoptosis. Caveolin interacts with and regulates heterotrimeric G-proteins. Currently, there are three members of the caveolin multigene family which are known to encode 21-24 kDa integral membrane proteins that comprise the major structural component of the caveolar membrane in vivo. Caveolin-2 protein is abundantly expressed in fibroblasts and differentiated adipocytes, smooth and skeletal muscle, and endothelial cells. The expression of caveolin-1 is similar to that of caveolin-2 while caveolin-3 expression appears to be limited to muscle tissue types.

**Synonyms:**

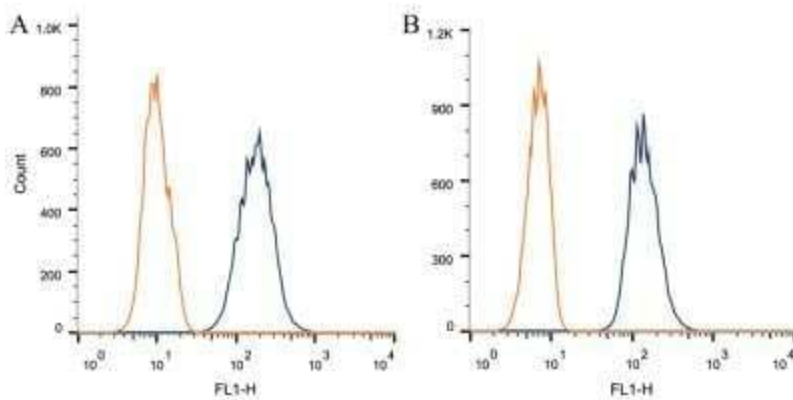
BSCL3; CGL3; LCCNS; MSTP085; PPH3; VIP21

**Protein Families:**

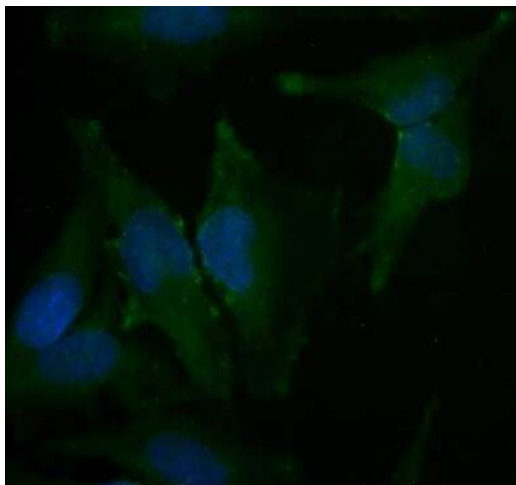
Druggable Genome, Transmembrane

**Protein Pathways:**

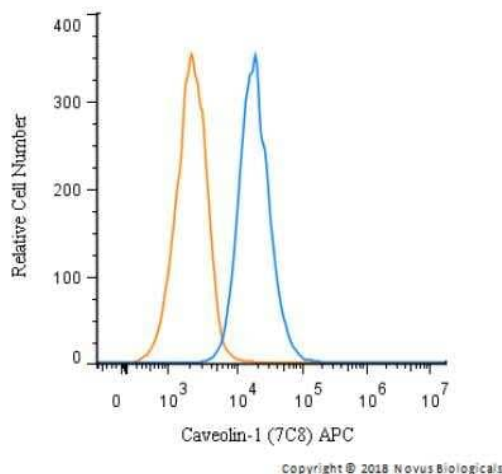
Focal adhesion, Viral myocarditis

**Product images:**

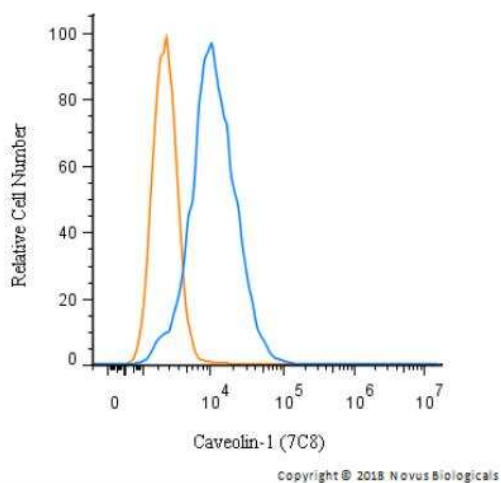
Flow Cytometry: Caveolin-1 Antibody (7C8) TA301445 - Intracellular flow cytometric staining of  $1 \times 10^6$  CHO (A) and HEK-293 (B) cells using Caveolin 1 antibody (dark blue). Isotype control shown in orange. An antibody concentration of  $1 \mu\text{g}/1 \times 10^6$  cells was used.



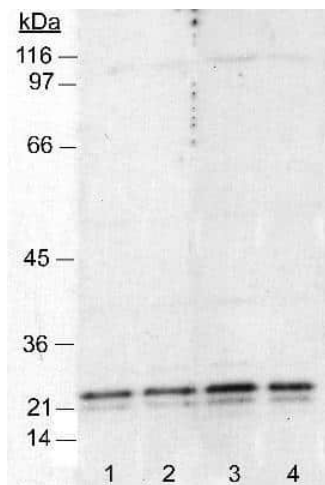
Immunocytochemistry/Immunofluorescence: Caveolin-1 Antibody (7C8) TA301445 - HeLa cells were fixed for 10 minutes using 10% formalin and then permeabilized for 5 minutes using 1X PBS + 0.05% Triton X-100. The cells were incubated with anti-Caveolin-1 [7C8] conjugated to Alexa Fluor 488 (TA301445AF488) at  $20 \mu\text{g}/\text{mL}$  for 1 hour at room temperature. Nuclei were counterstained with DAPI (Blue). Cells were imaged using a 40X objective.



Flow Cytometry: Caveolin-1 Antibody (7C8) TA301445 - An intracellular stain was performed on HeLa cells with Caveolin-1 Antibody (7C8) TA301445APC (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 1 ug/mL for 30 minutes at room temperature. Both antibodies were conjugated to allophycocyanin.



Flow Cytometry: Caveolin-1 Antibody (7C8) TA301445 - An intracellular stain was performed on HeLa cells with Caveolin-1 Antibody (7C8) TA301445 (blue) and a matched isotype control (orange). Cells were fixed with 4% PFA and then permeabilized with 0.1% saponin. Cells were incubated in an antibody dilution of 5 ug/mL for 30 minutes at room temperature, followed by mouse F(ab)2 IgG (H+L) APC-conjugated secondary antibody (F0101B, R&D Systems).



Western Blot: Caveolin-1 Antibody (7C8) TA301445 - Detection of caveolin in 3T3 cell lysates (50 ug). Lanes 1 and 2: 1:4000. Lanes 3 and 4: 1:1000. Detection by ECL: 5 minute exposure.