

**Product Name:** KO-Validated Caveolin 1 Recombinant Rabbit Monoclonal Antibody  
**Catalog #:** KVA00147

For research use only.

## Summary

|                     |                                                                             |
|---------------------|-----------------------------------------------------------------------------|
| <b>Description</b>  | KO&KD-Validated antibody                                                    |
| <b>Host</b>         | Rabbit                                                                      |
| <b>Application</b>  | WB,IHC-P                                                                    |
| <b>Reactivity</b>   | Human,M                                                                     |
| <b>Conjugation</b>  | Unconjugated                                                                |
| <b>Modification</b> | Unmodified                                                                  |
| <b>Isotype</b>      | Rabbit IgG                                                                  |
| <b>Clonality</b>    | Rabbit mAb                                                                  |
| <b>Form</b>         | Liquid                                                                      |
| <b>Storage</b>      | Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles. |
| <b>Shipping</b>     | Ice bags                                                                    |
| <b>Buffer</b>       | Supplied in PBS (pH 7.4) containing 50% glycerol, and 0.02% sodium azide.   |
| <b>Purification</b> | Affinity purification                                                       |

## Application

|                         |                                       |
|-------------------------|---------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:1,000-1:5,000; IHC-P 1:100-1:200 |
| <b>Molecular Weight</b> | Calculated MW: 20.5kDa                |

## Antigen Information

|                          |                                                                                                      |
|--------------------------|------------------------------------------------------------------------------------------------------|
| <b>Gene Name</b>         | CAV1<br>CAV1; Caveolin 1; Caveolin 1, Caveolae Protein, 22kDa; Caveolin-1; CAV; Caveolin 1, Caveolae |
| <b>Alternative Names</b> | Protein, 22kD; Cell Growth-Inhibiting Protein 32; MSTP085; BSCL3; LCCNS; VIP21; CGL3; PPH3           |
| <b>Gene ID</b>           | 857.0                                                                                                |
| <b>SwissProt ID</b>      | Q03135                                                                                               |
| <b>Immunogen</b>         | A synthesized peptide derived from human Caveolin-1                                                  |

## Background

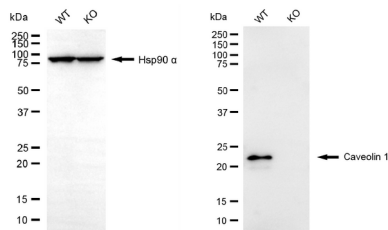
The scaffolding protein encoded by this gene is the main component of the caveolae plasma membranes found in most cell types. The protein links integrin subunits to the tyrosine kinase FYN, an initiating step in coupling integrins to the Ras-ERK

pathway and promoting cell cycle progression. The gene is a tumor suppressor gene candidate and a negative regulator of the Ras-p42/44 mitogen-activated kinase cascade. Caveolin 1 and caveolin 2 are located next to each other on chromosome 7 and express colocalizing proteins that form a stable hetero-oligomeric complex. Mutations in this gene have been associated with Berardinelli-Seip congenital lipodystrophy. Alternatively spliced transcripts encode alpha and beta isoforms of caveolin 1. [provided by RefSeq, Mar 2010]

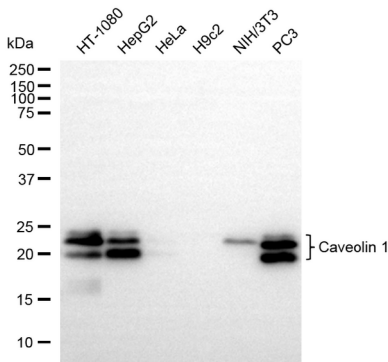
## Research Area

Cardiovascular, Signal Transduction, Tags & Cell Markers, Cancer, Metabolism, Neuroscience

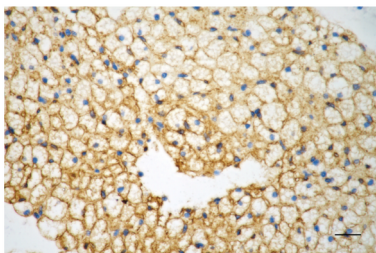
## Image Data



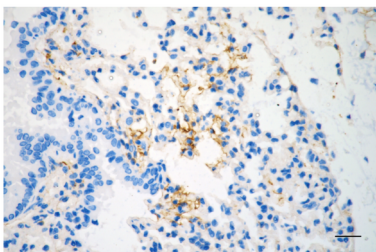
Western blotting analysis using caveolin 1 antibody (KVA00147). Caveolin 1 expression in wild-type (WT) and caveolin 1 (CAV1) knockout (KO) 293T cells with 30 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with caveolin 1 antibody (KVA00147, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



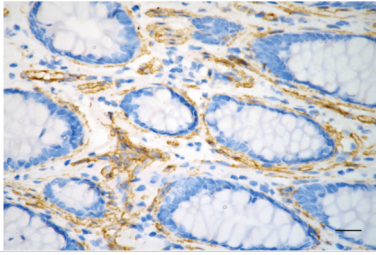
Western blotting analysis using Caveolin 1 antibody (KVA00147). Total cell lysates (5 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with Caveolin 1 antibody (KVA00147, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody (APS0635, 1:10,000) respectively.



Immunohistochemistry was performed on paraffin-embedded mouse brown adipose tissue using caveolin 1 antibody (KVA00147, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunohistochemistry was performed on paraffin-embedded mouse lung using caveolin 1 antibody (KVA00147, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25 µm.



Immunohistochemistry was performed on paraffin-embedded human sigmoid colon carcinoma using caveolin 1 antibody (KVA00147, 1:200). Antigen retrieval was done in sodium citrate buffer (pH 6.0). DAB was used for detection, with hematoxylin counterstaining. Images were acquired using a Nikon Ci-L Plus microscope (40× objective). Scale bar: 25  $\mu$ m.