

For Research Use Only

# Caveolin-1 Recombinant antibody

Catalog Number: 84044-1-RR



## Basic Information

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| <b>Catalog Number:</b><br>84044-1-RR                           | <b>GenBank Accession Number:</b><br>BC006432             | <b>Purification Method:</b><br>Protein A purification                  |
| <b>Size:</b><br>100ul , Concentration: 1000 µg/ml by Nanodrop; | <b>GeneID (NCBI):</b><br>857                             | <b>CloneNo.:</b><br>240985E4   |
| <b>Source:</b><br>Rabbit                                       | <b>UNIPROT ID:</b><br>Q03135                             | <b>Recommended Dilutions:</b><br>WB 1:5000-1:50000<br>IHC 1:250-1:1000 |
| <b>Isotype:</b><br>IgG   | <b>Full Name:</b><br>caveolin 1, caveolae protein, 22kDa |  |
| <b>Immunogen Catalog Number:</b><br>AG8049                     | <b>Calculated MW:</b><br>22 kDa                          |  |
|  | <b>Observed MW:</b><br>20-25 kDa                         |  |

## Applications

**Tested Applications:**  
WB, IHC, ELISA

**Species Specificity:**  
human, mouse

**Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0**

**Positive Controls:**

**WB :** NIH/3T3 cells, A549 cells, MDA-MB-231 cells

**IHC :** human colon cancer tissue, human colon tissue, human lung squamous cell carcinoma tissue

## Background Information

Caveolin-1 (CAV1), a multifunctional protein, is the main constituent molecule of caveolae and represents a scaffolding molecule for several signaling molecules including epidermal growth factor receptor (PMID: 19641024). Several studies have implicated that a reduced expression of CAV1 was found in cancers including head and neck carcinoma (PMID: 19002186). However, other studies recognize CAV1 as a tumor promoter because CAV1 is overexpressed in various kinds of cancers, especially in oral cancer (PMID: 20558341). Recent study also show that CAV1 is involved in gastric Cancer (PMID: 25339030).

## Storage

**Storage:**

Store at -20°C. Stable for one year after shipment.

**Storage Buffer:**

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

**\*\*\* 20ul sizes contain 0.1% BSA**

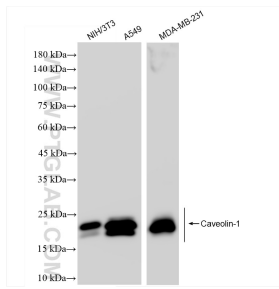
For technical support and original validation data for this product please contact:

T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)

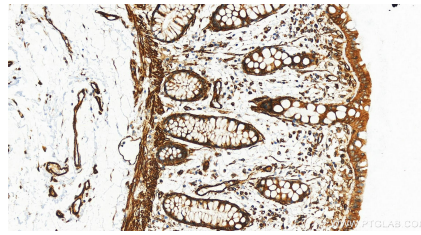
E: proteintech@ptglab.com  
W: ptglab.com

**This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.**

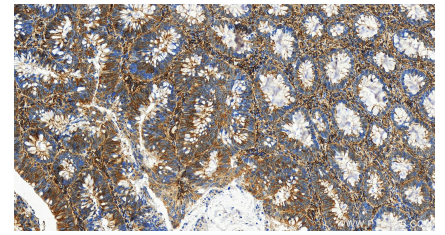
## Selected Validation Data



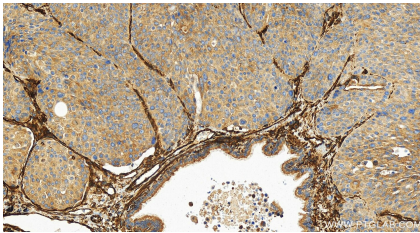
Various lysates were subjected to SDS PAGE followed by western blot with 84044-1-RR (Caveolin-1 antibody) at dilution of 1:15000 incubated at room temperature for 1.5 hours.



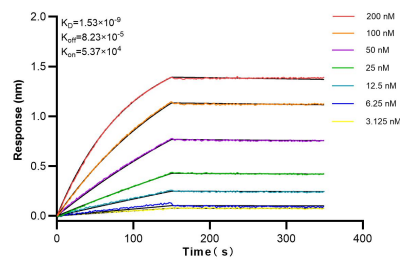
Immunohistochemical analysis of paraffin-embedded human colon tissue slide using 84044-1-RR (Caveolin-1 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human colon cancer tissue slide using 84044-1-RR (Caveolin-1 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human lung squamous cell carcinoma tissue slide using 84044-1-RR (Caveolin-1 antibody) at dilution of 1:500 (under 20x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Biolayer interferometry (BLI) kinetic assays of 84044-1-RR against Human Caveolin-1 were performed. The affinity constant is 1.53 nM.