



Polyclonal Antibody to Caveolin-1 - Aff - Purified

Alternate names: CAV1

Catalog No.: SP5142P

Quantity: 0.1 mg

Concentration: 1.0 mg/ml

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.

Uniprot ID: P49817

Host / Isotype: Rabbit

Immunogen: Synthetic peptide corresponding to amino acid residues 1-17 from Human Caveolin-1

AA Sequence: M(1) S G G K Y V D S E G H L Y T V P(17) C

Remarks: This sequence is completely conserved between Human, Mouse, Canine, Bovine and Rat.

SP5142P immunizing peptide (SP5142CP) is available for use in Neutralization and Control experiments.

Format: State: Liquid purified IgG fraction.

Purification: Epitope Affinity Chromatography.

Buffer System: PBS containing 1 mg/ml BSA as stabilizer and 0.05% Sodium Azide as preservative.

Applications: Immunoprecipitation.

Western Blot (1-2 µg/ml): Detects an ~22 kDa protein representing Caveolin-1 from Rat heart protein extract.

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

Specificity: This antibody detects Caveolin-1 from Canine, Hamster, Mouse, and Rat tissues and cells.

Species: Canine, Hamster, Mouse and Rat.

Others not tested.

Add. Information: Species Dilution for Western Blot:

1/1,000 for Mouse: SP5142P was used in Western blot to investigate the impact of L-FABP mutations on hepatic fatty acid binding capacity, lipid composition, and expression of other lipid-binding proteins (See Martin GG et al. *J Biol Chem.* 2003 Jun 13;278(24):21429-38 for more details).

1/1,000 for Rat: SP5142P was used in western blot to study effect of diet on endothelial functions (See Roberts CK et al. *J Appl Physiol.* 2005 Jan;98(1):203-10).

Storage: Store the antibody (in aliquots) at -20°C.

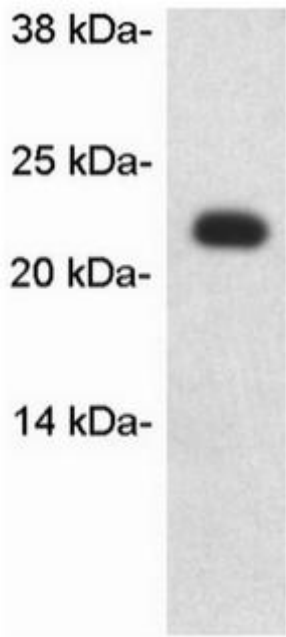
Avoid repeated freezing and thawing.

Shelf life: one year from despatch.

General References: 1. *Cytokine Growth Factor Rev.*, 2:41-51, 2001.

2. *J. Cell. Sci.*, 114:1397-1408, 2001.

3. *Traffic*, 1:212-217, 2001.



Pictures:

Western blot detection of Caveolin-1 on Rat heart protein extract using SP5142P CAV1 antibody.

**Recommended
Control Peptides:
SP5142CP**

GENTAUR