Technical Data Sheet

Purified Mouse Anti-Caveolin 1

Product Information

Material Number: 610387 Size: 50 μg 250 μg/ml Concentration: C20B Clone:

RSV-CEF Caveolin aa. 1-178 Immunogen:

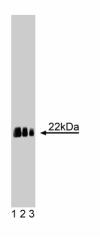
Mouse IgG1 Isotype: Reactivity: QC Testing: Chicken

Target MW:

Storage Buffer: Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium

Description

Identified as a tyrosine phosphorylated protein in Rous sarcoma virus- ransformed chick embryo fibroblasts (CEF), caveolin is now known to be ubiquitously expressed. Caveolin (also known as VIP21) localizes to non-clathrin membrane invaginations (caveolae) on the inner surface of the plasma membrane. This transmembrane protein plays a structural role in these specializations. Caveolin is also present at the trans-Golgi network (TGN) and similar quantities are found in apically and basolaterally destined transport vesicles. Caveolin is part of a complex containing glycosylphosphatidylinositol (GPI)-linked molecules and cytoplasmic signaling proteins. Caveolin is a transmembrane adaptor molecule that can simultaneously recognize GPI-linked proteins and interact with downstream cytoplasmic signaling molecules, such as c-yes, Annexin II, and hetero-trimeric G proteins. Caveolin-1 can generate two forms, α and β, due to alternate splicing of the mRNA. Caveolin-1 forms large lipid-binding homo-oligomers which are believed to play a role in caveolae formation. It may also function as a scaffolding protein which concentrates and organizes signaling molecules, a role supported by the fact that caveolin-1 interacts directly with inactive Ras and G-protein α subunits.



Western blot analysis of Caveolin 1 on SL-29 lysate. Lane 1: 1:5000, lane 2: 1:10000, lane 3: 1:20000 dilution of Caveolin 1.

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. Store undiluted at -20°C.

Application Notes

Application

Application		
Western blot	Routinely Tested	
Immunoprecipitation	Tested During Development	
Immunofluorescence	Tested During Development	
Immunohistochemistry	Not Recommended	

Recommended Assay Procedure:

Western blot: Please refer to http://www.bdbiosciences.com/pharmingen/protocols/Western Blotting.shtml.

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Suggested Companion Products

Catalog Number	Name	Size	Clone
611478	SL-29 Cell Lysate	500 μg	(none)
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)

Product Notices

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
- 4. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

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García-Cardeña G, Fan R, Stern DF, Liu J, Sessa WC. Endothelial nitric oxide synthase is regulated by tyrosine phosphorylation and interacts with caveolin-1. *J Cell Biol.* 1996; 271(44):27237-27240.(Biology)

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610387 Rev. 1 Page 2 of 2