

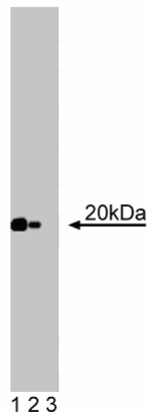
Technical Data Sheet

Purified Mouse Anti-Caveolin 2**Product Information**

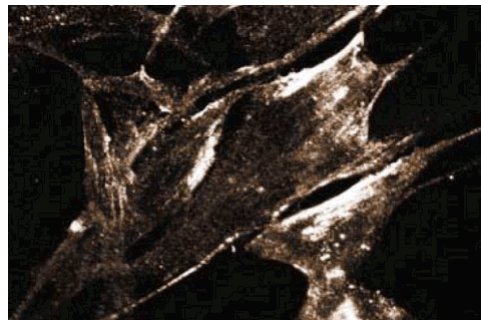
Material Number:	610685
Size:	150 µg
Concentration:	250 µg/ml
Clone:	65/Caveolin 2
Immunogen:	Human Caveolin 2 aa. 42-162
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Mouse Tested in Development: Human, Rat
Target MW:	20 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% sodium azide.

Description

Identified as a tyrosine phosphorylated protein in Rous sarcoma virus- transformed 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. Although caveolin 2 is similar to caveolin 1 in distribution and tissue expression, caveolin 2 is most abundant in adipose tissue and its expression is up-regulated upon differentiation. This antibody has been reported to recognize an epitope located within region 79-88 of caveolin 2.



Western blot analysis of Caveolin 2 on a RSV-3T3 cell lysate. Lane 1: 1:250, lane 2: 1:500, lane 3: 1:1000 dilution of the mouse anti-Caveolin 2 antibody.



Immunofluorescence staining of FHS cells (Normal human fetal lung fibroblasts; ATCC HTB-157).

Preparation and Storage

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

BD Biosciences

bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2008 BD



Application Notes

Application

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

Recommended Assay Procedure:

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

Suggested Companion Products

Catalog Number	Name	Size	Clone
554002	HRP Goat Anti-Mouse Ig	1.0 ml	(none)
554001	FITC Goat Anti-Mouse Ig	0.5 mg	Polyclonal

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.
3. 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

Das K, Lewis R, Scherer P, Lisanti M. The membrane-spanning domains of caveolins-1 and -2 mediate the formation of caveolin hetero-oligomers. *J Biol Chem.* 1999; 274(26):18721-18728.(Immunogen)
Kiss AL, Turi A, Mullner N, Timar J. Caveolin isoforms in resident and elicited rat peritoneal macrophages. *Eur J Cell Biol.* 2000; 79(5):343-349.(Biology: Immunofluorescence, Immunohistochemistry, Immunoprecipitation, Western blot)
Scherer PE, Okamoto T, Chun M, Nishimoto I, Lodish HF, Lisanti MP. Identification, sequence, and expression of caveolin-2 defines a caveolin gene family. *Proc Natl Acad Sci U S A.* 1996; 93(1):131-135.(Biology)
Tauchi-Sato K, Ozeki S, Houjou T, Taguchi R, Fujimoto T. The surface of lipid droplets is a phospholipid monolayer with a unique Fatty Acid composition. *J Biol Chem.* 2002; 277(46):44507-44512.(Biology: Electron microscopy, Western blot)
Woodman SE, Park DS, Cohen AW, et al. Caveolin-3 knock-out mice develop a progressive cardiomyopathy and show hyperactivation of the p42/44 MAPK cascade. *J Biol Chem.* 2002; 277(41):38988-38997.(Biology: Immunofluorescence, Western blot)
Zschocke J, Manthey D, Bayatti N, van der Burg B, Goodenough S, Behl C. Estrogen receptor alpha-mediated silencing of caveolin gene expression in neuronal cells. *J Biol Chem.* 2002; 277(41):38772-38780.(Biology: Immunofluorescence, Immunohistochemistry, Western blot)