Technical Data Sheet

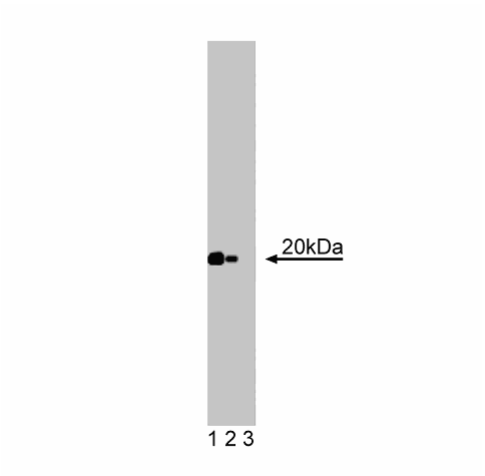
Purified Mouse Anti-Caveolin 2

Product Information

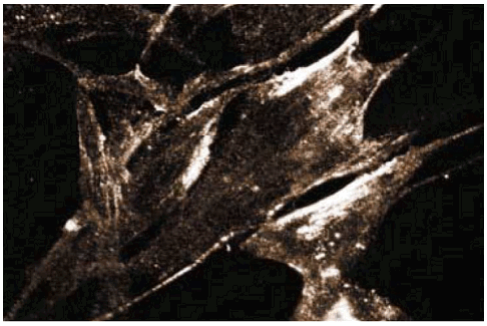
Material Number:	**610684**
Size:	50 µg
Concentration:	250 µg/ml
Clone:	65/Caveolin 2
Immunogen:	Human Caveolin 2 aa. 42-162
Isotype:	Mouse IgG1
Reactivity:	QC Testing: Mouse Tested in Development: Human, Rat
Target MW:	20 kDa
Storage Buffer:	Aqueous buffered solution containing BSA, glycerol, and ≤0.09% 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.*



Immunoflurorescence 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

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Application Notes

Application

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

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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)