

**Mouse Anti-Caveolin 1 [6C2B2]: MC0492, MC0492RTU7**

**Intended Use:** For Research Use Only

**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. Caveolin-1 can generate two forms,  $\alpha$  and  $\beta$ , due to alternate splicing of the mRNA. Caveolin-1 forms large lipid-binding homo-oligomers which are believed to lay a role in caveolae formation.

**Specifications:**

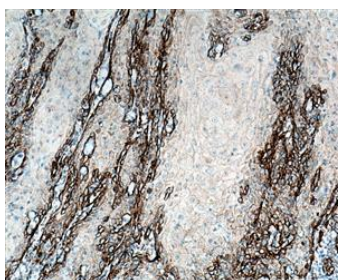
|               |  |
|---------------|--|
| Clone:        | 6C2B2  |
| Source:       | Mouse  |
| Isotype:      | IgG1   |
| Reactivity:   | Human, rat, dog, rabbit  |
| Immunogen:    | Caveolin-1 fusion protein Ag8049   |
| Localization: | Membrane   |
| Formulation:  | Purified antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN <sub>3</sub> ). |
| Storage:      | Store at 2°- 8°C   |
| Applications: | IHC, ELISA, WB   |
| Package:      |  |

| Description             | Catalog No. | Size |
|-------------------------|-------------|------|
| Caveolin 1 Concentrated | MC0492      | 1 ml |
| Caveolin 1 Prediluted   | MC0492RTU7  | 7 ml |

**IHC Procedure\*:**

|                           |   |
|---------------------------|---|
| Positive Control Tissue:  | Human urinary bladder or atheroma tissue  |
| Concentrated Dilution:    | 100-300   |
| Pretreatment:             | Tris EDTA pH9.0, 15 minutes Pressure Cooker or 30-60 minutes water bath at 95°-99°C |
| Incubation Time and Temp: | 30-60 minutes @ RT  |
| Detection:                | Refer to the detection system manual  |

\* Result should be confirmed by an established diagnostic procedure.



FFPE human skin cancer stained with anti-Caveolin 1 using DAB

**References:**

1. Decreased caveolin-1 in atheroma: Loss of antiproliferative control of vascular smooth muscle cells in atherosclerosis. Carsten S., et al. Cardiovascular Research 68: 128 – 135, 2005.
2. PC12 cells have caveolae that contain TrkA. Caveolae-disrupting drugs inhibit nerve growth factor-induced, but not epidermal growth factor-induced, MAPK phosphorylation. Peiro S, et al. J Biol Chem. 275(48):37846-37852, 2000.