

DESCRIPTION

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|---------------------------|--|
| Species Reactivity | Human/Mouse/Rat |
| Specificity | Caveolin-1 antibodies are ideal for immunocytochemistry colocalization studies in caveolae. The unconjugated antibody detects endogenous human, mouse and rat Caveolin-1 in Western blots. |
| Source | Monoclonal Mouse IgG _{2B} Clone # 7C8 |
| Purification | Protein A or G purified from hybridoma culture supernatant |
| Immunogen | Purified rat adipocyte low density microsomes Accession # P41350 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS and Sodium Azide with BSA as a carrier protein. See Certificate of Analysis for details. |

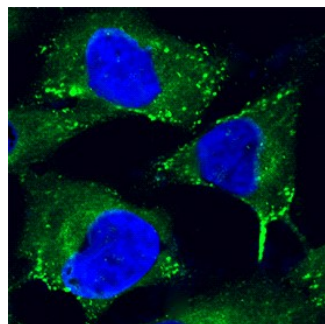
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

| | Recommended Concentration | Sample |
|----------------------------|----------------------------------|---------------|
| Immunocytochemistry | 8-25 µg/mL | See Below |

DATA

Immunocytochemistry



Caveolin-1 in HeLa Human Cell Line.
Caveolin-1 was detected in formaldehyde fixed HeLa human cervical epithelial carcinoma cell line using Mouse Anti-Human/Mouse/Rat Caveolin-1 Biotinylated Monoclonal Antibody (Catalog # BAM5736) at 25 µg/mL overnight at 4 °C. Cells were stained using the NorthernLights™ 493-conjugated Streptavidin (green; Catalog # NL997) and counterstained with DAPI (blue). Specific staining was localized to caveolae. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

| | |
|--------------------------------|---|
| Reconstitution | Reconstitute at 0.5 mg/mL in sterile PBS. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. |
| Stability & Storage | <p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

Caveolin-1 is a palmitoylated 22 kDa membrane-associated protein in caveolae, the cholesterol-rich invaginations in the plasma membrane involved in vesicular transport and regulation of lipid rafts. Caveolin-1 expression is dysregulated during cancer progression and exhibits both positive and negative effects on tumor progression. The central region of Caveolin-1 (amino acids 105-125) is buried in the lipid layer, while the N- and C-terminal flanking regions are exposed to the cytoplasm and interact with many other proteins. Within these cytoplasmic regions, human Caveolin-1 shares 95% amino acid sequence identity with mouse and rat Caveolin-1. Alternate splicing in human, mouse and rat generates an isoform with a deletion of the N-terminal 31 residues.