

## DESCRIPTION

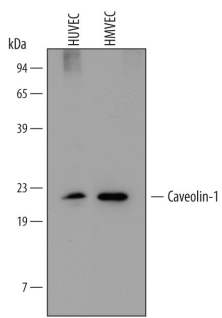
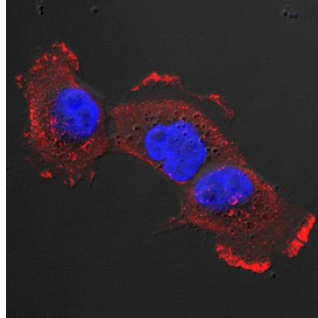
<b>Species Reactivity</b>	Human/Mouse/Rat
<b>Specificity</b>	Detects endogenous human, mouse and rat Caveolin-1 in Western blots.
<b>Source</b>	Monoclonal Mouse IgG <sub>2B</sub> Clone # 7C8
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Purified rat adipocyte low density microsomes Accession # P41350
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

## 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
<b>Western Blot</b>	1 µg/mL	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human Caveolin-1 by Western Blot.</b> Western blot shows lysates of HUVEC human umbilical vein endothelial cells and HMVEC human microvascular endothelial cells. PVDF membrane was probed with 1 µg/mL of Human/Mouse/Rat Caveolin-1 Monoclonal Antibody (Catalog # MAB5736) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Caveolin-1 at approximately 22 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 2.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>Caveolin-1 in A431 Human Cell Line.</b> Caveolin-1 was detected in immersion fixed A431 human epithelial carcinoma cell line using Mouse Anti-Human/Mouse/Rat Caveolin-1 Monoclonal Antibody (Catalog # MAB5736) at 8 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>
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## PREPARATION AND STORAGE

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

## 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 (aa 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% aa 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.