

**DESCRIPTION**

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Matrilin-1 in ELISAs. In direct ELISAs, no cross-reactivity with recombinant human Matrilin-2, -3, or -4 is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 828806
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Chinese hamster ovary cell line CHO-derived recombinant human Matrilin-1 Ser23-Val496 Accession # P21941
<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.

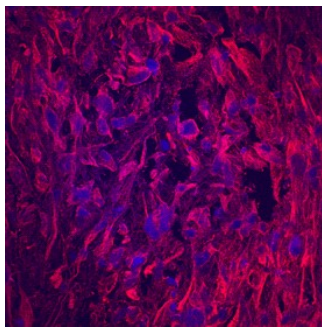
**APPLICATIONS**

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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

**DATA**

**Immunocytochemistry**



**Matrilin-1 in Human Mesenchymal Stem Cells.** Matrilin-1 was detected in immersion fixed human mesenchymal stem cells differentiated into chondrocytes using Mouse Anti-Human Matrilin-1 Monoclonal Antibody (Catalog # MAB7878) at 10 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 cartilage matrix. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.2 mg/mL.
<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**

Matrilin-1, also known as Cartilage Matrix Protein (CMP) is a 50-60 kDa extracellular matrix protein that belongs to the superfamily of von Willebrand factor A (VWA) containing proteins. It is primarily expressed in cartilage and functions as a bridging component between proteins of the collagenous matrix. Mature human Matrilin-1 contains two VWA domains that flank one EGF-like repeat, followed by a C-terminal coiled coil domain. The Matrilins differ in the number of VWA domains (one or two) and EGF-like repeats (one, three, four, or ten) they contain. Human Matrilin-1 shares 91% aa sequence identity with human and rat Matrilin-1. The coiled coil domain of Matrilin-1 mediates disulfide-linked homo-trimer formation. It can also assemble into hetero-oligomers with Matrilin-2, -3, and -4.