

## DESCRIPTION

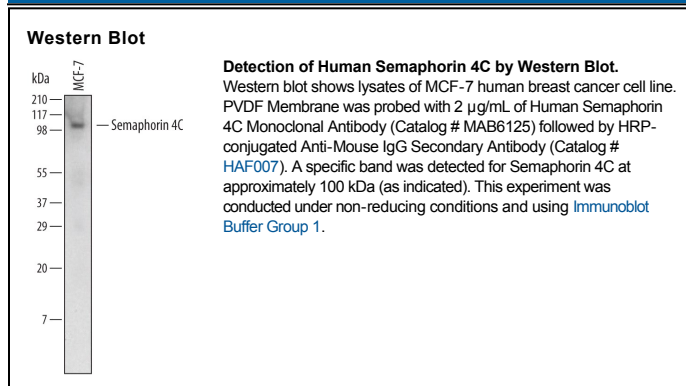
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Semaphorin 4C in direct ELISAs. In direct ELISAs, no cross-reactivity with recombinant human Semaphorin 3A, 3B, 3C, 3D, 3E, 3F, 4A, 4B, 4D, 4G, 5A, 5B, 6A, 6B, 6C, 6D, 7A, recombinant mouse Semaphorin 3B, 3C, 3E, 3F, 4A, 4B, 4C, 4D, 4F, 4G, 6A, 6B, 6C, 6D, or 7A is observed.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 660016
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant human Semaphorin 4C Ala21-Gly663 (predicted) Accession # Q9C0C4
<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 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>	2 µg/mL	See Below

## DATA



## PREPARATION AND STORAGE

<b>Reconstitution</b>	Sterile PBS to a final concentration of 0.5 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>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <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

Semaphorin 4C (Sema4C; also Sema I and M-SemaF) is a 100-105 kDa, class IV member of the semaphorin family of proteins. It is expressed by precursors to neurons and myocytes, and may regulate their differentiation into mature forms. Mature human Semaphorin 4C is a type I transmembrane glycoprotein that is 813 amino acids (aa) in length. It contains a 643 aa extracellular region (aa 21-663) that is characterized by the presence of one Sema domain (aa 30-497), a PSI region (aa 499-551), and an Ig-like C2-type domain (aa 556-644). The cytoplasmic region interacts with PZD-domain containing proteins. There are three potential splice variants. One demonstrates an alternative start site at Met324, a second shows a deletion of aa 173-211, and a third contains an 89 aa substitution for aa 1-36. Over aa 21-663, human Semaphorin 4C shares 85% aa identity with mouse Semaphorin 4C.