

## DESCRIPTION

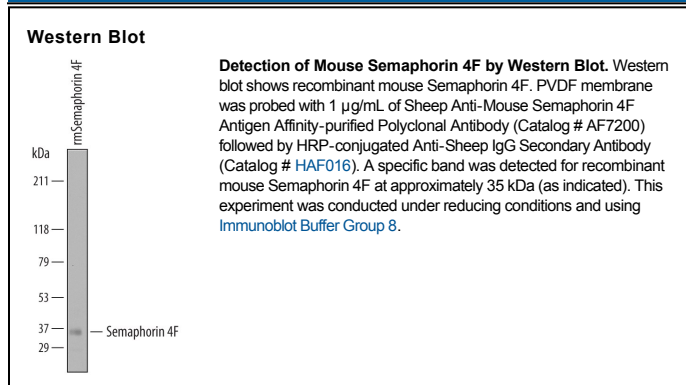
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Semaphorin 4F in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant mouse (rm) Semaphorin 4B, rmSemaphorin 4C, and rmSemaphorin 4D is observed.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Semaphorin 4F Arg41-Gly667 Accession # Q9Z123
<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>	1 µg/mL	See Below

## DATA



## 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

Semaphorin 4F (Sema4F; also Sema W) is a 90-100 kDa, class IV member of the semaphorin family of proteins. It is expressed by select cell types, including Schwann cells and neurons, and likely acts as an inhibitor of cell proliferation by Schwann cells, and a regulator of postsynaptic glutamatergic synapses on neuron dendrites. Mature mouse Sema4F is a type I transmembrane protein that is 737 amino acids (aa) in length. It contains a 627 aa extracellular region (aa 41-667) that is characterized by the presence of one Sema domain (aa 71-493), a PSI region (aa 518-569), and a C2-type Ig-like domain (aa 586-641). Over aa 41-667, mouse Sema4F shares 92% and 98% aa identity with human and rat Sema4F, respectively.