

DESCRIPTION

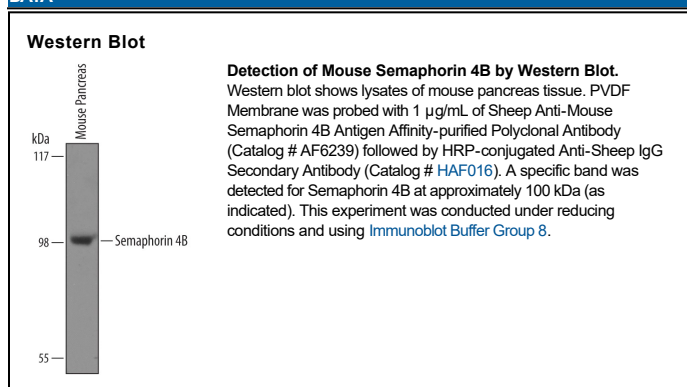
Species Reactivity	Mouse
Specificity	Detects mouse Semaphorin 4B in direct ELISAs and Western blots. In Western blots, approximately 25% cross-reactivity with recombinant human Semaphorin 4B is observed and less than 2% cross-reactivity with recombinant mouse (rm) Semaphorin 4A and rmSemaphorin 4C is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Semaphorin 4B Leu31-Glu703 Accession # Q62179
Formulation	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
Western Blot	1 µg/mL	See Below

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	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
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <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

Semaphorin 4B (Sema4B; also SemaC) is a 95-100 kDa, class IV member of the semaphorin family of proteins. It is expressed in neurons, and following PSD-95 induced clustering, participates in the formation or functioning of glutamatergic synapses. Mature mouse Sema4B is a type I transmembrane glycoprotein that is 793 amino acids (aa) in length. It contains a 673 aa extracellular region (aa 31-703) that is characterized by one Sema domain (aa 57-492), a PSI region (aa 512-582), and an Ig-like C2-type domain (aa 589-649). There are three phosphoserines in the cytoplasmic tail. Over aa 31-703, mouse Sema4B shares 86% and 95% aa identity with human and rat Sema4B, respectively.