

# Mouse Semaphorin 4B Antibody

Antigen Affinity-purified Polyclonal Sheep IgG Catalog Number: AF6239

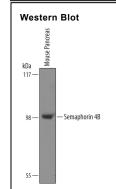
DESCRIPTION		
Species Reactivity	Mouse	
Specificity	Detects mouse Semaphorin 4B in direct ELISAs and Western blots. In Western blots, approximately 25% cross-reactivity with recombinant human Semaphorin 4B is observed and less than 2% cross-reactivity with recombinant mouse (rm) Semaphorin 4A and rmSemaphorin 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.

Concent	ition
Western Blot 1 μg/mL	See Below

#### DATA



# Detection of Mouse Semaphorin 4B by Western Blot.

Western blot shows lysates of mouse pancreas tissue. PVDF Membrane was probed with 1 µg/mL of Sheep Anti-Mouse Semaphorin 4B Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6239) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Semaphorin 4B at approximately 100 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.

# 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.

- 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.

#### • 0 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.

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