

## DESCRIPTION

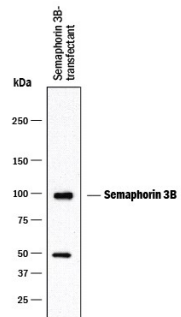
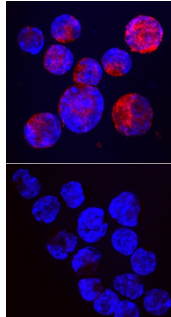
<b>Species Reactivity</b>	Mouse
<b>Specificity</b>	Detects mouse Semaphorin 3B in direct ELISAs.
<b>Source</b>	Monoclonal Rat IgG <sub>2A</sub> Clone # 904201
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	Mouse myeloma cell line NS0-derived recombinant mouse Semaphorin 3B Pro26-Pro722 Accession # Q62177
<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>	0.5 µg/mL	See Below
<b>Immunocytochemistry</b>	8-25 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p> 	<p><b>Detection of Mouse Semaphorin 3B by Western Blot.</b> Western blot shows lysates of NS0 mouse myeloma cell line transfected with mouse Semaphorin 3B. PVDF membrane was probed with 0.5 µg/mL of Rat Anti-Mouse Semaphorin 3B Monoclonal Antibody (Catalog # MAB5440) followed by HRP-conjugated Anti-Rat IgG Secondary Antibody (Catalog # HAF005). A specific band was detected for Semaphorin 3B at approximately 100 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>Semaphorin 3B in NS0 Mouse Cell Line.</b> Semaphorin 3B was detected in immersion fixed NS0 mouse myeloma cell line transfected with mouse Semaphorin 3B (upper panel) or irrelevant transfected (lower panel) using Rat Anti-Mouse Semaphorin 3B Monoclonal Antibody (Catalog # MAB5440) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Rat IgG Secondary Antibody (red; Catalog # NL013) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for <a href="#">Fluorescent ICC Staining of Non-adherent Cells</a>.</p>
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## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.5 mg/mL in sterile PBS.
<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

Sema3b (Semaphorin 3B) is a 748 aa secreted glycoprotein. Mouse Sema3b shares 88% and 96% aa identity with human and rat Sema3b, respectively. The semaphorin family has been demonstrated to play a role in axon guidance. Additionally, Sema3b has been implicated in bone mass regulation and tumor suppression.