

DESCRIPTION

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|---------------------------|---|
| Species Reactivity | Mouse/Rat |
| Specificity | Detects mouse Plexin A3 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 5% cross-reactivity with recombinant mouse (rm) Plexin A1, rmPlexin A2, recombinant human (rh) Plexin B1, rhPlexin C1, and rhPlexin D1 is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant mouse Plexin A3 Leu34-Asp150 Accession # P70208 |
| 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 as a 0.2 µm filtered solution in PBS. |

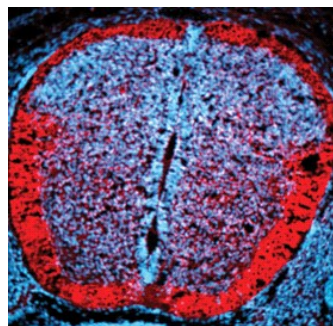
APPLICATIONS

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 | 0.1 µg/mL | Recombinant Mouse Plexin A3 |
| Immunohistochemistry | 5-15 µg/mL | See Below |

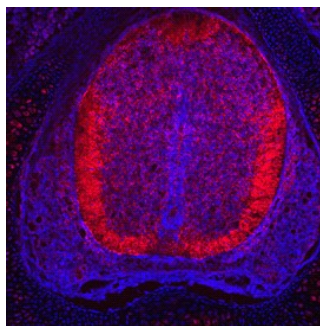
DATA

Immunohistochemistry



Plexin A3 in Mouse Spinal Cord.
Plexin A3 was detected in immersion fixed frozen sections of mouse spinal cord using Goat Anti-Mouse Plexin A3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4075) at 10 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

Immunohistochemistry



Plexin A3 in Rat Spinal Cord. Plexin A3 was detected in immersion fixed frozen sections of embryonic rat spinal cord using Goat Anti-Mouse Plexin A3 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4075) at 10 µg/mL overnight at 4 °C. Tissue was stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red; Catalog # NL001) and counterstained with DAPI (blue). View our protocol for [Fluorescent IHC Staining of Frozen Tissue Sections](#).

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

Plexin A3 (also known as SEX) is a 220 kDa member of the Plexin A subfamily of semaphorin receptors. Mature mouse Plexin A3 is predicted to be an 1853 amino acid (aa) type I transmembrane glycoprotein that contains a 1202 aa extracellular domain (ECD) and a 629 aa cytoplasmic region. The ECD contains one semaphorin domain (aa 34-473), three plexin-semaphorin-integrin (PSI) domains (aa 492-830), and four Ig-like plexin-transcription factor (IPT) repeats (aa 841-1209). Plexin A3 interacts with neuropilins 1 and 2, and binds class 3 semaphorins. Over aa 35-150, mouse Plexin A3 is 99% and 97% aa identical to rat and human Plexin A3, respectively.