

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Plexin C1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, less than 1% cross-reactivity with recombinant mouse Plexin A1, A2, A3, recombinant human Plexin B1, B2, and D1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Plexin C1 Ala35-Thr950 Accession # Q9QZC2
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.

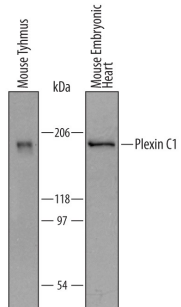
APPLICATIONS

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
Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
Immunohistochemistry	5-15 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

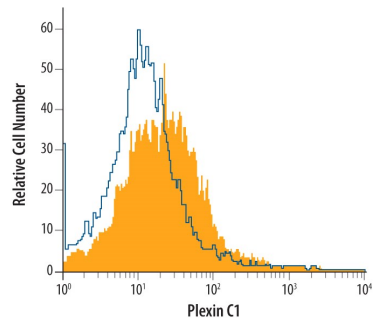
DATA

Western Blot



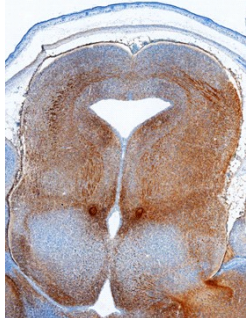
Detection of Mouse Plexin C1 by Western Blot. Western blot shows lysates of mouse thymus tissue and embryonic mouse heart tissue. PVDF membrane was probed with 1 µg/mL of Sheep Anti-Mouse Plexin C1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5375) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for Plexin C1 at approximately 200 kDa (as indicated). This experiment was conducted under reducing conditions and using [Immunoblot Buffer Group 8](#).

Flow Cytometry



Detection of Plexin C1 in Mouse Splenocytes by Flow Cytometry. Mouse splenocytes were stained with Sheep Anti-Mouse Plexin C1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5375, filled histogram) or control antibody (Catalog # 5-001-A, open histogram), followed by NorthernLights™ 637-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # NL011).

Immunohistochemistry



Plexin C1 in Mouse Embryo. Plexin C1 was detected in immersion fixed frozen sections of mouse embryo (15 d.p.c.) using Sheep Anti-Mouse Plexin C1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5375) at 5 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Sheep HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS019) and counterstained with hematoxylin (blue). Specific staining was localized to neurites in the developing midbrain. View our protocol for [Chromogenic 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 C1 (also VESPR and CD232) is a 200-210 kDa member of the plexin C subfamily, plexin family of proteins. It is a type I transmembrane glycoprotein that is found on monocytes, dendritic cells, neutrophils and embryonic neuroendocrine neurons of the hypothalamus. Plexin C1 binds Sema7A, and its viral counterpart, vaccinia semaphorin A39R. Ligation induces actin cytoskeletal rearrangement and cell immobilization. Mature mouse Plexin C1 is 1540 amino acids (aa) in length. It contains a 916 aa extracellular domain that shows one Sema-domain (aa 35-452) and a 603 aa cytoplasmic tail. There are two potential splice variants that show a five and 67 aa substitution for aa 861-870 and 1206-1574, respectively. Over aa 35-950, mouse Plexin C1 is 95% and 85% aa identical to rat and human Plexin C1, respectively.