

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Plexin A1 in direct ELISAs.
Source	Monoclonal Mouse IgG _{2B} Clone # 708954
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Plexin A1 Tyr964-Leu1152 Accession # Q9UIW2
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
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunocytochemistry	5-25 µg/mL	See Below

DATA

<p>Flow Cytometry</p>  <p>Detection of Plexin A1 in K562 Human Cell Line by Flow Cytometry. K562 human chronic myelogenous leukemia cell line was stained with Mouse Anti-Human Plexin A1 Monoclonal Antibody (Catalog # MAB65361, filled histogram) or isotype control antibody (Catalog # MAB0041, open histogram) followed by PE-conjugated Goat anti-Mouse IgG secondary antibody (Catalog # F0102B). View our protocol for Staining Membrane-associated Proteins.</p>	<p>Immunocytochemistry</p>  <p>Plexin A1 in Human PBMCs. Plexin A1 was detected in immersion fixed human peripheral blood mononuclear cells (PBMCs) differentiated to dendritic cells using Mouse Anti-Human Plexin A1 Monoclonal Antibody (Catalog # MAB65361) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to transmembrane. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>
--	---

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 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 A1 is an approximately 200 kDa type I transmembrane member of the Plexin family of Semaphorin signal transducers. It consists of a 1218 amino acid (aa) extracellular domain with one Sema domain, a spacer, and four tandem IPT/TIG domains, a 21 aa transmembrane segment, and a 631 aa cytoplasmic domain. Plexin A1 binds the transmembrane Semaphorin 6D directly and binds the Class 3 secreted Semaphorins indirectly via Neuropilin-1 and -2. It mediates cytoskeletal remodeling that results in cell migration and axon repulsion. Within aa 964-1152 (in the IPT/TIG region), human Plexin A1 shares 93% aa sequence identity with mouse and rat Plexin A1.