

DESCRIPTION

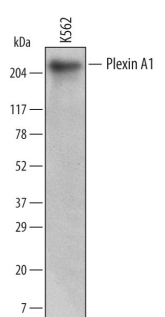
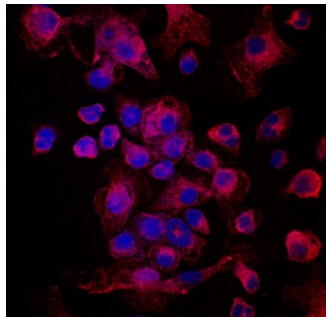
Species Reactivity	Human
Specificity	Detects human Plexin A1 in direct ELISAs. In Western blots, no cross-reactivity with recombinant human Plexin A4, B1, B2, B3, C1, D1, recombinant mouse Plexin A1, A2, or A3 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 659807
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Plexin A1 Asn986-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
Western Blot	1 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

DATA

<p>Western Blot</p>  <p>Detection of Human Plexin A1 by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line. PVDF Membrane was probed with 1 µg/mL of Mouse Anti-Human Plexin A1 Monoclonal Antibody (Catalog # MAB6536) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for Plexin A1 at approximately 210 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p>Immunocytochemistry</p>  <p>Plexin A1 in Human Dendritic Cells. Plexin A1 was detected in immersion fixed immature human dendritic cells using Mouse Anti-Human Plexin A1 Monoclonal Antibody (Catalog # MAB6536) 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 cell surfaces and cytoplasm. View our protocol for Fluorescent ICC Staining of Non-adherent Cells.</p>
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PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
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.