

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 either lyophilized or as a 0.2 µm filtered solution in PBS.

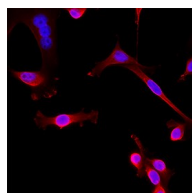
APPLICATIONS

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.

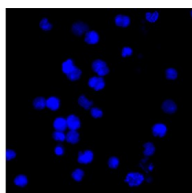
	Recommended Concentration	Sample
Immunocytochemistry	3-25 µg/mL	See Below

DATA

Immunocytochemistry



Positive (MDA-MB cells)



Negative (Daudi cells)

Detection of Plexin A1 in MDA-MB-231 cells and Daudi cells.

Plexin A1 was detected in immersion fixed MDA-MB-231 human breast cancer cell line (Positive) and absent in Daudi human Burkitt's lymphoma cell line (Negative) using Mouse Anti-Human Plexin A1 Monoclonal Antibody (Catalog # MAB65361) at 3 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 the cell surface. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS. For liquid material, refer to CoA for concentration.
Shipping	Lyophilized product is shipped at ambient temperature. Liquid small pack size (-SP) is shipped with polar packs. Upon receipt, store immediately at the temperature recommended below.
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.