

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Plexin B1 in direct ELISAs.
Source	Monoclonal Mouse IgG ₁ Clone # 559830
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	NS0 mouse myeloma cell line transfected with human Plexin B1 Accession # O43157
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

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	0.25-1 µg/10 ⁶ cells	Jurkat human acute T cell leukemia cell line

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

Plexin B1 is a 300 kDa member of the B subfamily, Plexin family of Semaphorin receptors. Mature human Plexin B1 is a 2116 amino acid type I transmembrane (TM) glycoprotein that contains a 1471 aa extracellular domain (ECD) and a 612 aa cytoplasmic region. The ECD contains one Semaphorin domain, two PSI domains, and three IPT repeats. The ECD is cleaved into two subunits, a 200 kDa α-chain (aa 20-1305) and a 100 kDa TM β-chain. The subunits are nondisulfide-linked and generate a high-affinity receptor. Plexin B1 is a receptor for Semaphorin 4D/CD100. It forms a receptor complex with neuropilins, MET, and EGF R2. Of three known splice variants, one shows a deletion of aa 689-871, a second shows a 53 aa substitution for aa 677-2135, and a third shows a 53 aa substitution for the 53 aa between aa 677-729. Over aa 35-150, human Plexin B1 shares 90% and 97% aa sequence identity with dog and mouse Plexin B1, respectively.

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