

## DESCRIPTION

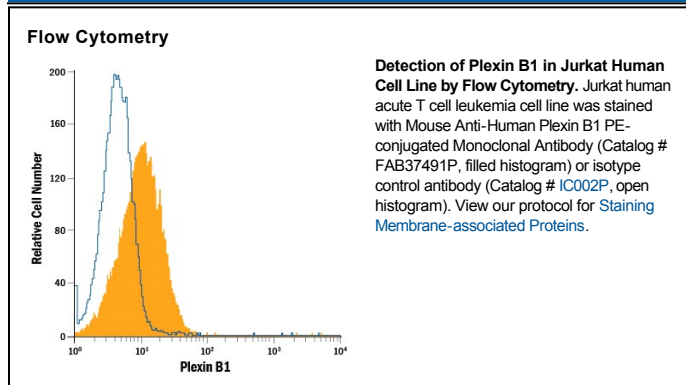
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human Plexin B1 in direct ELISAs.
<b>Source</b>	Monoclonal Mouse IgG <sub>1</sub> Clone # 559830
<b>Purification</b>	Protein A or G purified from hybridoma culture supernatant
<b>Immunogen</b>	NS0 mouse myeloma cell line transfected with human Plexin B1 Accession # O43157
<b>Conjugate</b>	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 nm
<b>Formulation</b>	Supplied 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
<b>Flow Cytometry</b>	10 $\mu$ L/10 <sup>6</sup> cells	See Below

## DATA



## PREPARATION AND STORAGE

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

## 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 (aa) 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  $\alpha$ -chain (aa 20-1305) and a 100 kDa TM  $\beta$ -chain. The subunits are non-disulfide-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 canine and mouse Plexin B1, respectively.