**DESCRIPTION**

**Species Reactivity** Human

**Specificity** Detects human Plexin B2 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant human Plexin A4, B1, B3, C1, D1, or recombinant mouse Plexin A1, A2, or A3 is observed.

**Source** Monoclonal Mouse IgG2A Clone # 537237

**Purification** Protein A or G purified from hybridoma culture supernatant

**Immunogen** Chinese hamster ovary cell line CHO-derived recombinant human Plexin B2 Leu20-Arg1160

**Accession #** O15031

**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.

<table>
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<th>Sample</th>
<th>Recommended Concentration</th>
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<tr>
<td>Western Blot</td>
<td>1 µg/mL Recombinant Human Plexin B2 under non-reducing conditions only</td>
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**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.

- 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 B2 is a 240 kDa member of the B subfamily, plexin family of semaphorin receptors. It is expressed by cerebellar granule cells, neuroepithelium and chondrocytes, and serves as a receptor for Semaphorin 4C. Mature human Plexin B2 is 1819 amino acid (aa) in length. It is a type I transmembrane (TM) glycoprotein that contains an 1178 aa extracellular domain (ECD) plus a 620 aa cytoplasmic region. The ECD contains one semaphorin domain (aa 20-466) and three IPT repeats (aa 803-1092). The ECD may be cleaved into two subunits, a 170 kDa α-chain (aa 20-1164) and an 80 kDa TM β-chain that remain noncovalently-linked. Multiple splice variants may exist. One shows an alternate start site at Met1369, while a second shows a deletion of aa 67-638. Over aa 20-1160, human Plexin B2 is 82% aa identical to mouse Plexin B2.