

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Human                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | 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.                                                                  |
| <b>Source</b>             | Monoclonal Mouse IgG <sub>2A</sub> Clone # 537237                                                                                                                                                                                                                           |
| <b>Purification</b>       | Protein A or G purified from hybridoma culture supernatant                                                                                                                                                                                                                  |
| <b>Immunogen</b>          | Chinese hamster ovary cell line CHO-derived recombinant human Plexin B2<br>Leu20-Arg1160<br>Accession # O15031                                                                                                                                                              |
| <b>Conjugate</b>          | Alexa Fluor 405<br>Excitation Wavelength: 405 nm<br>Emission Wavelength: 421 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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.

**Western Blot** Optimal dilution of this antibody should be experimentally determined.

## 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. 12 months from date of receipt, 2 to 8 °C as supplied

## 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.

## PRODUCT SPECIFIC NOTICES

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