



## ***Biotinylated Anti-human Plexin B2 Antibody***

### **ORDERING INFORMATION**

**Catalog Number:** BAF5329

**Lot Number:** CCB01

**Size:** 50 µg

**Formulation:** 0.2 µm filtered solution in PBS with BSA

**Storage:** -20° C

**Reconstitution:** sterile 0.1% BSA in TBS

**Specificity:** human Plexin B2 extracellular domain

**Immunogen:** CHO cell-derived rhPlexin B2 (aa 20 - 1160)

**Ig Type:** sheep IgG

**Application:** Western blot

### ***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 Sema4C. 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  $\alpha$ -chain (aa 20 - 1164) and an 80 kDa TM  $\beta$ -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.

### ***Preparation***

Produced in sheep immunized with purified, CHO cell-derived, recombinant human Plexin B2 (rhPlexin B2; aa 20 - 1160; Accession # O15031). Human Plexin B2 specific IgG was purified by human Plexin B2 affinity chromatography and then biotinylated.

### ***Formulation***

Lyophilized from a 0.2 µm filtered solution in phosphate-buffered saline (PBS) containing 50 µg of bovine serum albumin (BSA) per 1 µg of antibody.

### ***Reconstitution***

Reconstitute with sterile Tris-buffered saline pH 7.3 (20 mM Trizma base, 150 mM NaCl) containing 0.1% BSA. If 1 mL of buffer is used, the antibody concentration will be 50 µg/mL.

### ***Storage***

Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C **in a manual defrost freezer** for six months without detectable loss of activity. **Avoid repeated freeze-thaw cycles.**

### ***Specificity***

This antibody has been selected for use as a detection antibody in human Plexin B2 Western blots.

### ***Application***

**Western blot** - This antibody can be used at 0.1 - 0.2 µg/mL with the appropriate secondary reagents to detect human Plexin B2. The detection limit for rhPlexin B2 is approximately 5 ng/lane under non-reducing and reducing conditions. In this format, this antibody shows less than 1% cross-reactivity with rhPlexin A4, rhPlexin B1, rhPlexin B3, rhPlexin C1 and rhPlexin D1.

**Optimal dilutions should be determined by each laboratory for each application.**