

Human Plexin B2 Antibody

Monoclonal Mouse IgG_{2A} Clone # 537237 Catalog Number: MAB5329

DESCRIPTION			
Species Reactivity	Human		
Specificity Detects human Plexin B2 in direct ELISAs and Western blots. In direct ELISAs, no cross-reactivity with recombinant h B3, C1, D1, or recombinant mouse Plexin A1, A2, or A3 is observed.			
Source	Monoclonal Mouse IgG _{2A} 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 as a 0.2 µm filtered solution in PBS.		

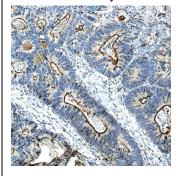
APPLICATIONS

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.

	Recommended Concentration	Sample
Western Blot	1 μg/mL	Recombinant Human Plexin B2 under non-reducing conditions only
Immunohistochemistry	8-25 μg/mL	See Below

DATA

Immunohistochemistry



Plexin B2 in Human Colon. Plexin B2 was detected in immersion fixed paraffinembedded sections of human colon using Mouse Anti-Human Plexin B2 Monoclonal Antibody (Catalog # MAB5329) at 15 µg/mL overnight at 4 °C. Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using the Anti-Mouse HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS002) and counterstained with hematoxylin (blue). Specific staining was localized to brush border in epithelial cells. View our protocol for Chromogenic IHC Staining of Paraffinembedded Tissue Sections.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 0.5 mg/ml	_ in sterile PBS.
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ShippingThe 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

- 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.

