

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Plexin B1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human (rh) Plexin C1, rhPlexin D1, recombinant mouse (rm) Plexin A1, rmPlexin A2, or rmPlexin A3 is observed.
Source	Monoclonal Mouse IgG ₁ Clone # 439512
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	<i>E. coli</i> -derived recombinant human Plexin B1 Leu35-Val150 Accession # O43157
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *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.
Immunohistochemistry	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 B1 is a 300 kDa member of the B subfamily, Plexin family of Semaphorin receptors. Mature human Plexin B1 is a 2116 amino acid 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 α-chain (aa 20-1305) and a 100 kDa TM β-chain. The subunits are nondisulfide-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. Multiple splice variants are known. 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 is 90% and 97% aa identical to dog and mouse Plexin B1, respectively.

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