

DESCRIPTION

Species Reactivity	Mouse/Rat
Specificity	Detects mouse and rat Plexin B3 in direct ELISAs and Western blots. In direct ELISAs, approximately 38% cross-reactivity with recombinant human (rh) Plexin B3 is observed, and less than 1% cross-reactivity with rhPlexin B2 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Chinese hamster ovary cell line CHO-derived recombinant mouse Plexin B3 His25-Gln1235 Accession # Q9QY40
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.

CyTOF-ready	Optimal dilution of this antibody should be experimentally determined.
Western Blot	Optimal dilution of this antibody should be experimentally determined.
Flow Cytometry	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-B3 (also plexin-6) is a 260-270 kDa member of the plexin-B subfamily, plexin family of proteins. It is found on postnatal neurons and oligodendroglia, and appears to have opposing functions. In a context-dependent manner, plexin-B3 may block cell process extension and induce growth cone collapse by binding to Sema5. Conversely, it may engage in homophilic interactions *in trans*, promoting growth cone extension and axon elongation. The HGF receptor Met has been reported to complex with plexin-B3 *in cis*, and this interaction may contribute to its reported opposing effects. Mature mouse plexin-B3 is an 1868 amino acid (aa) type I transmembrane glycoprotein. It contains a 1211 aa extracellular domain (ECD) (aa 25-1892) plus a 636 aa cytoplasmic region. The ECD contains one Sema-domain (aa 25-451), two PSI domains (aa 454-646) and four IPT regions (aa 814-1224). There is one isoform variant that contains an alternative Met start site 10 aa upstream of the standard site. Based on human studies, proteolysis of mouse plexin-B3 likely occurs, generating 160 kDa and 140 kDa ECD fragments. Over aa 25-1235, mouse plexin-B3 shares 95% and 82% aa identity with rat and human plexin-B3, respectively.

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