Rat Neuropilin-2
Alexa Fluor® 350-conjugated Antibody

Recombinant Monoclonal Mouse IgG_{2B} Clone # 96009R

Catalog Number: FAB567RU

100 µg

DESCRIPTION

Species Reactivity	Rat
Specificity	Detects rat Neuropilin-2 in direct ELISAs.
Source	Recombinant Monoclonal Mouse IgG_{2B} Clone # 96009R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat Neuropilin-2 Gln23-Asp857 (Val809-Asp825 del) Accession # O35276
Conjugate	Alexa Fluor 350 Excitation Wavelength: 346 nm Emission Wavelength: 442 nm
Formulation	Supplied 0.2 mg/mL in a saline solution containing BSA and 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.*

	Recommended Concentration	Sample
Flow Cytometry	0.25-1 µg/10^6 cells	C6 Rat Cell Line

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

Neuropilin-1 (Npn-1, previously known as neuropilin) and Npn-2 (previously known as Npn-1-related molecule) are type I transmembrane proteins that bind members of the class III secreted semaphorin subfamily which are implicated in repulsive axon guidance. The extracellular domain of these proteins is composed of two N-terminal CUB (complement-binding) domains (domains a1 and a2), two domains with homology to coagulation factors V and VIII (domains b1 and b2) and a MAM (meprin) domain (domain c). In the absence of ligands, neuropilins can form homo- and hetero-oligomers via homophilic interactions of their MAM domains. At the amino acid sequence level, Npn-1and Npn-2 share 44% identity. Npn-1 and Npn-2 show different binding specificities for different members of the semaphorin family. The expression patterns of Npn-1 and Npn-2 in developing neurons of the central and peripheral nervous systems are largely, though not completely non-overlapping. Npn-1 and Npn-2 are also expressed by endothelial and tumor cells and have been shown to be isoform-specific receptors for $VEGF_{165}$. Npn-1 was also reported to bind PlGF-2 and the VEGF-like protein from of virus NZ2.

References:

1. Fujisawa, H. and T. Kitsukawa (1998) Curr. Opin. Neurobiol. **8**:587.
2. Neufeld, G. *et al.* (1999) FASEB J. **13**:9.
3. Poltorak, Z. *et al.* (2000) J. Biol. Chem. **275**:18040.

PRODUCT SPECIFIC NOTICES

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