

DESCRIPTION

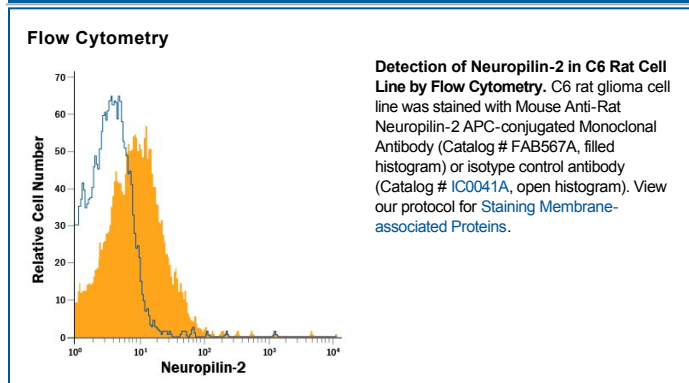
Species Reactivity	Rat
Specificity	Detects rat Neuropilin-2 in direct ELISAs and Western blots. In direct ELISAs and Western blots, this antibody does not cross-react with recombinant human Neuropilin-1.
Source	Monoclonal Mouse IgG _{2B} Clone # 96009
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant rat Neuropilin-2 Gln23-Asp857 (Val809-Asp825 del) Accession # O35276
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *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	10 µL/10 ⁶ cells	See Below

DATA



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-2 (Npn-2), previously known as Npn-1-related molecule, is a 120-140 kDa type I transmembrane protein that belongs to the neuropilin family of molecules. It binds members of the class III secreted semaphorin subfamily (Sema3C and 3F), multiple VEGFs (VEGF₁₄₅, VEGF₁₆₅, VEGF-C and VEGF-D), PIGF, and HGF, and forms complexes with NRP1, Plexin A1,A2, A3, A4 and Plexin B1, plus VEGFR1, 2 and 3, and Integrin α6β1. 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 (aa) sequence level, Npn-2 shares 96% and 94% aa sequence identity with mouse and human Neuropilin-2, respectively. 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-2 is expressed by vascular and lymphatic endothelium plus tumor cells, and has been suggested to appear also on macrophages, GABAergic neurons and proximal convoluted tubule cells.