

DESCRIPTION

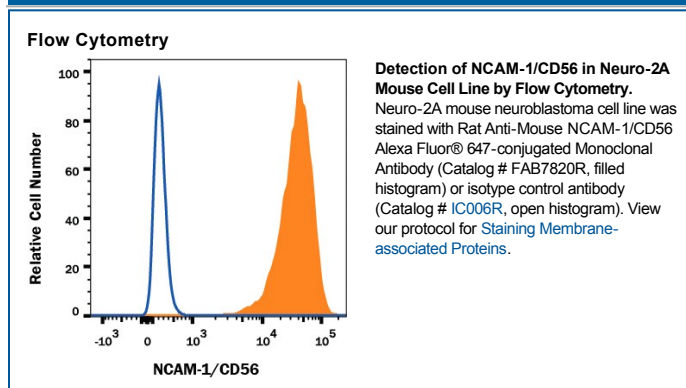
Species Reactivity	Mouse
Specificity	Detects mouse NCAM-1/CD56 in direct ELISAs and Western blots.
Source	Monoclonal Rat IgG _{2A} Clone # 809220
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse NCAM-1/CD56 Leu20-Thr711 Accession # P13595
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 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	0.25-1 µg/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. <ul style="list-style-type: none"> 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

NCAM-1 (Neural adhesion molecule-1; also CD56) is a 120-190 kDa glycoprotein member of the Ig Superfamily. It is expressed on multiple cell types, both in the embryo and adult. Here, it serves as both an adhesion molecule and a receptor for multiple ligands, including as FGFR, PDGF, GDNF and agrin. On the cell surface, it is a cis-oriented homodimer that can form homodimers in-trans with other cis-homodimers. In the embryo, NCAM-1 is polysialylated (PolySia), and shows a MW of 200-220 kDa in SDS-PAGE. This polysialylation reduces the ability of NCAM-1 to dimerize. Mature mouse NCAM-1 is a 1096 amino acid (aa) type I transmembrane (TM) protein (aa 20-1115). It possesses a 692 aa extracellular region (aa 20-711) and a 386 aa cytoplasmic domain. The extracellular region contains five consecutive C2-type Ig-like domains (aa 20-492) followed by two FN type-III domains (aa 497-692). Multiple splice variants exist. There is a 140 kDa TM variant that shows a deletion of aa 810-1076, and a 120 kDa variant that is GPI-linked and shows a 24 aa substitution for aa 702-1115. A third potential variant contains a five aa substitution for aa 601-1115. Over aa 20-711, mouse NCAM-1 shares 99% and 95% aa identity with rat and human NCAM-1, respectively.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.