

DESCRIPTION

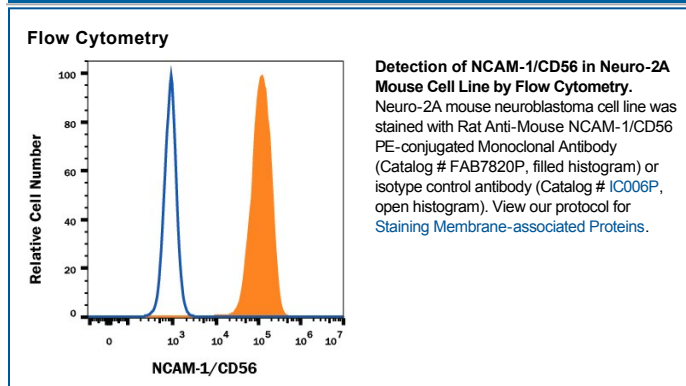
Species Reactivity	Mouse
Specificity	Detects mouse NCAM-1/CD56 in direct ELISAs.
Source	Monoclonal Rat IgG _{2A} Clone # 809220
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse NCAM-1/CD56 Leu20-Thr711 Accession # P13595
Conjugate	Phycoerythrin Excitation Wavelength: 488 nm Emission Wavelength: 565-605 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.