

## Monoclonal Antibody to CD56 - FITC

**Alternate names:** N-CAM-1, NCAM, NCAM-1, Neural cell adhesion molecule 1

**Catalog No.:** AM05639FC-N

**Quantity:** 0.1 mg

**Concentration:** 0.1 mg/ml

**Background:** The CD56 molecule is a cell surface glycoprotein which is expressed on neuroendocrine cells, natural killer cells and a subset of T cells in the peripheral blood. Three main isoforms of CD56 exist. Neurons express the largest 180kD form, while haemopoietic cells express the 140kD isoform. Antibodies produced by clone 123C3 recognise the 140 and 180kD isoforms of the CD56 protein.  
In neuronal tissues, CD56 mediates homophilic and heterophilic adhesion and is implicated in neural development. Studies suggest that CD56 is also expressed on thyroid follicular epithelium and may play a role in autoimmune disease of the thyroid. CD56 is expressed in a range of tumours including tumours of the lung, neural derived malignancies and natural killer cell lymphomas.

**Uniprot ID:** [P13591](#)

**NCBI:** [NP\\_000606.3](#)

**GeneID:** [4684](#)

**Host / Isotype:** Mouse / IgG1

**Clone:** 123C3

**Immunogen:** Small cell lung carcinoma

**Format:** **State:** Liquid purified IgG fraction  
**Purification:** Affinity Chromatography on Protein G  
**Buffer System:** PBS, pH 7.4  
**Preservatives:** 0.09% Sodium Azide  
**Stabilizers:** 1% BSA  
**Label:** FITC – Fluorescein Isothiocyanate Isomer 1

**Applications:** **Flow Cytometry:** Use 10 µl of Neat-1/10 diluted antibody to label  $1 \times 10^6$  cells in 100 µl. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This antibody recognises neural cell adhesion molecule (NCAM), otherwise known as CD56.  
**Species:** Human.  
Other species not tested.

**Storage:**

Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer.  
This product is photosensitive and should be preprotected from light.  
Avoid repeated freezing and thawing.  
Shelf life: one year from despatch.

**General Readings:**

1. Moolenaar CE, Muller EJ, Schol DJ, Figdor CG, Bock E, Bitter-Suermann D, et al. Expression of neural cell adhesion molecule-related sialoglycoprotein in small cell lung cancer and neuroblastoma cell lines H69 and CHP-212. *Cancer Res.* 1990 Feb 15;50(4):1102-6. PubMed PMID: 2153450.
2. Schol DJ, Mooi WJ, van der Gugten AA, Wagenaar SS, Hilgers J. Monoclonal antibody 123C3, identifying small cell carcinoma phenotype in lung tumours, recognizes mainly, but not exclusively, endocrine and neuron-supporting normal tissues. *Int J Cancer Suppl.* 1988;2:34-40. PubMed PMID: 2832332.
3. Mooi WJ, Wagenaar SS, Schol D, Hilgers J. Monoclonal antibody 123C3 in lung tumour classification. *Immunohistology of 358 resected lung tumours.* *Mol Cell Probes.* 1988 Mar;2(1):31-7. PubMed PMID: 2837665.

**Pictures:**

Staining of hamster peripheral blood lymphocytes with MOUSE ANTI HUMAN CD56: FITC(AM05639FC-N).

