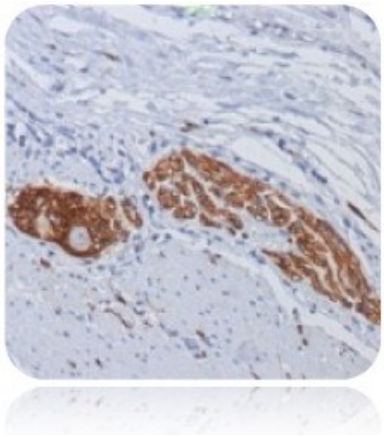
CD56; Clone 123C3
(Concentrate)

Description:

Species:	Mouse
Immunogen:	The immunogen for this CD56 antibody was a membrane preparation of a small cell lung carcinoma.
Clone:	123C3
Isotype:	Mouse IgG1, Kappa
Format:	This antibody is provided in a phosphate buffered saline containing 1% BSA.
Specificity:	This antibody recognizes two proteins (185kDa & 145kDa), identified as two isoforms of neural cell adhesion molecule (NCAM/CD56). It is used as a tumor marker in various cancers such as NK lymphomas and Merkel cell carcinoma. NCAM is expressed on most neuroectodermal derived lines, tissues, and neoplasms such as retinoblastoma, medulloblastoma, astrocytoma, and neuroblastoma. It is also expressed on some mesodermally derived tumors such as rhabdomyosarcoma and also on natural killer cells.
Background:	CD56, a 175-220KDa glycoprotein, is a member of the Ig super family. It is expressed as three major isoforms and consists of five Ig-like domains and two Fibronectin-type III domains in the extracellular region. The 135kDa isoform is the basic molecule which is glycosylated or sialylated to produce the mature species. CD56 is widely expressed in nervous system, on NK cells and a specific set of Tcells. CD56+ NK cells and Tcells are unique in their ability to mediate cell-mediated cytotoxicity against certain tumor cell targets without MHC restriction. Other physiological functions of CD56 include mediating cell adhesion through homophilic and heterophilic interaction and activating intracellular signaling pathways resulting in neutrite extension and fasciculation, migration and synapses formation in brain. CD56 is also vital for neuronal development and plasticity in adult brain.
Species Reactivity:	Human.
Positive Control:	Tonsil, Neuroblastoma, Pancreatic Islet cells.
Cellular Localization:	Cytoplasmic & Cell Membrane.
Titer/Working Dilution:	Immunohistochemistry: 1:50 – 1:100
Microbiological State:	This product is not sterile.

Uses/Limitations:

Not to be taken internally.
For Research Use Only.
This product is intended for qualitative immunohistochemistry with normal and neoplastic formalin-fixed, paraffin-embedded tissue sections, to be viewed by light microscopy.
Do not use if reagent becomes cloudy.
Do not use past expiration date.
Use caution when handling reagents.
Non-Sterile.



Ordering Information and Current Pricing at www.teomics.com

Procedure:

1. **Tissue Section Pretreatment REQUIRED:** Staining of formalin fixed, paraffin embedded tissue sections is enhanced by pretreatment with Citrate Plus (10X) HIER Solution (Teomics catalog# CPL500).

2. **Primary Antibody Incubation Time:** We suggest an incubation period of 30 minutes at room temperature. However, depending upon the fixation conditions and the staining system employed, optimal incubation should be determined by the user.

3. **Visualization:** For maximum staining intensity we recommend the "UltraTek HRP Anti-Polyvalent Lab Pack" (Teomics catalog# UHP125, see IFU for instructions) combined with the "DAB Chromogen/Substrate Bulk Pack (High Contrast)" (Teomics catalog# ACV500, see IFU for instructions).

Precautions:

Contains Sodium Azide as a preservative (0.09% w/v).
Do not pipette by mouth.
Avoid contact of reagents and specimens with skin and mucous membranes.
Avoid microbial contamination of reagents or increased nonspecific staining may occur.
This product contains no hazardous material at a reportable concentration according to U.S. 29 CFR 1910.1200, OSHA Hazardous Communication Standard and EC Directive 91/155/EC.

References:

1. Langdon SP; Lawrie SS; Hay FG; Hawkes MM; McDonald A; Hayward IP; Schol DJ; Hilgers J; Leonard RC; Smyth JF. Cancer Research, 1988 Nov 1, 48(21):6166-72.
2. Schol DJ; Mooi WJ; van der Gugten AA; Wagenaar SS; Hilgers J. International Journal of Cancer. Supplement, 1988, 2:34-40.
3. Mooi WJ; Wagenaar SS; Schol D; Hilgers J. Molecular and Cellular Probes, 1988 Mar, 2(1):31-7.
4. Brezicka FT; Olling S; Bergman B; Berggren H; Engstrom CP; Holmgren J; Larsson S; Lindholm L. Apmis, 1991 Sep, 99(9):797-802.
5. Ioachim HL; Pambuccian S; Giancotti F; Dorsett B. International Journal of Cancer. Supplement, 1994, 8:132-3.
6. Komminoth P; Roth J; Saremaslani P; Matias-Guiu X; Wolfe HJ; Heitz PU. American Journal of Surgical Pathology, 1994, 18(4):399-411.
7. Koros AM; Bey EA; Conley SL; Rogers BW. International Journal of Cancer. Supplement, 1994, 8:127-31.
8. Scheidegger EP; Lackie PM; Papay J; Roth J. Laboratory Investigation, 1994, 70:95-106.

Warranty:

No products or "Instructions For Use (IFU)" are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our IFU or website. Our warranty is limited to the actual price paid for the product. Teomics, LLC is not liable for any property damage, personal injury, time or effort or economic loss caused by our products. Immunohistochemistry is a complex technique involving both histological and immunological detection methods. Tissue processing and handling prior to immunostaining can cause inconsistent results. Variations in fixation and embedding or the inherent nature of the tissue specimen may cause variations in results. Endogenous peroxidase activity or pseudoperoxidase activity in erythrocytes and endogenous biotin may cause non-specific staining depending on detection system used.