

# CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

**Product name** CD56, Human, clone 123C3

Catalog number HM2132-20UG

Lot number - Expiry date -

Volume 200 μl Amount 20 μg

Formulation 0.2 μm filtered in PBS+0.1%BSA+0.02%NaN3 Concentration 100 μg/ml

Host Species Mouse IgG1 Conjugate None

Endotoxin N.A. Purification Protein G

Storage 4°C

## **Application notes**

|             | IHC-F | IHC-P | IF | FC | FS | IA | IP | W |
|-------------|-------|-------|----|----|----|----|----|---|
| Reference # |       |       |    |    |    |    |    |   |
| Yes         | •     | •     | •  |    |    |    |    |   |
| No          |       |       |    |    |    |    |    |   |
| N.D.        |       |       |    | •  | •  | •  | •  | • |

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot

Dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:10.

IHC-P: formalin fixed paraffin sections should be pretreated in microwave or pressure cooker.

### **General Information**

### Description

CD56 is an isoform of the Neural Cell Adhesion Molecule (NCAM). CD56 is an adhesion molecule involved in intercellular homophilic adhesion and plays a role in outgrowth of neurites and the development of the nervous system. Furthermore CD56 is a marker for natural killer cells and found in various tumors. Several isoforms of NCAM have been identified: two transmembrane isoforms of 140 and 180 kD, a GPI-linked isoform of 120 kD which lacks a transmembrane domain and a fourth variant which is leading to the expression of a soluble form (sNCAM). Antibody 123C3 recognizes the transmembrane glycoprotein of 140 and 180 kD. At the international Workshop on SCLC antibody 123C3 has been categorized as cluster 1 antibody. All cells in small cell carcinomas and carcinoids of the lung are strongly positive for 123C3. In non-small lung cell carcinomas, 123C3 staining has been associated with more advanced stage and a decreased survival after surgery. Positive staining with other tumors, include medullary thyroid carcinomas and some ovarian tumors. Furthermore, this antibody can be used to support diagnosis of lymphoma or to detect residual disease for cases of CD56 positive T/NK -cell lymphoma in which the neoplastic lymphoid cells are small and show minimal atypia, especially in small biopsies.

### Aliases Neural Cell Adhesion Molecule, NCAM

#### References

- Moolenaar, C 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, 50: 1102
- 2. Kibbelaar, R et al; Neural cell adhesion molecule expression, neuroendocrine differentiation and prognosis in lung carcinoma. Eur J Cancer 1991, *27*: 431
- Stahel, R et al; Third International Workshop on Lung Tumor and Differentiation Antigens: overview of the results
  of the central data analysis. Int J Cancer Suppl 1994, 8:6
- Tsang, W et al; Utility of a paraffin section-reactive CD56 antibody (123C3) for characterization and diagnosis of lymphomas. Am J Surg Pathol 1996, 20: 202

Version: 08-2020

# Storage&stability

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

#### **Precautions**

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC Brenda Teunissen

Date 18/11/2020

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.