

## Datasheet: MCA1556SBY665

**BATCH NUMBER 100007713**

<b>Description:</b>	MOUSE ANTI HUMAN CD10:StarBright Yellow 665
<b>Specificity:</b>	CD10
<b>Other names:</b>	CALLA
<b>Format:</b>	StarBright Yellow 665
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	SN5c
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS/0.5ml

### Product Details

#### Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit [www.bio-rad-antibodies.com/protocols](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat

Where this product has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the product for use in their own system using appropriate negative/positive controls.

#### Target Species

Human

#### Product Form

Purified IgG conjugated to StarBright Yellow 665 - liquid

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Yellow 665	554	670

#### Preparation

Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant

#### Buffer Solution

Phosphate buffered saline

#### Preservative Stabilisers

0.09% Sodium Azide (NaN<sub>3</sub>)  
1% Bovine Serum Albumin  
0.1% Pluronic F68  
0.1% PEG 3350

0.05% Tween 20

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**Immunogen** Partially purified cell membrane antigens from fresh leukemia cells

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**External Database Links**

**UniProt:**

[P08473](#)   [Related reagents](#)

**Entrez Gene:**

[4311](#)   MME   [Related reagents](#)

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**Synonyms** EPN

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**Fusion Partners** Spleen cells from immunized BALB/c mice were fused with cells of the mouse PS/NS1 /1-Ag4-1 myeloma cell line

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**Specificity** **Mouse anti Human CD10 antibody, clone SN5c** recognizes human neprilysin, also known as CD10, atriopetidase, enkephalinase, neutral endopeptidase 24.11, skin fibroblast elastase or common acute lymphocytic leukemia antigen (CALLA). CD10 is a 749 aminoacid, ~100 kDa single pass type II transmembrane glycoprotein expressed by acute lymphoblastic leukaemia cells and by peripheral blood granulocytes.

Defects in the MME gene encoding CD10 can lead to the development of the peripheral nervous system disorder, Charcot-Marie-Tooth disease 2T (CMY2T), an axonal form of Marie-Charcot-Tooth disease characterized by either dominantly inherited primary peripheral demyelinating neuropathies, designated CMT1, or primary peripheral axonal neuropathies showing axonal degeneration in the absence of any obvious myelin alteration (CMT2).

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**Flow Cytometry** Use 5µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

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- References**
1. Biddle, W.C. *et al.* (1989) *In vitro* and *in vivo* cytotoxic activity of anti-human leukemia monoclonal antibodies SN5c and SN6 daunorubicin conjugates. [Leuk Res. 13 \(8\): 699-707.](#)
  2. Riemann, D. *et al.* (2001) Caveolae/lipid rafts in fibroblast-like synoviocytes: ectopeptidase-rich membrane microdomains. [Biochem J. 354 \(Pt 1\): 47-55.](#)
  3. Diaz-Romero, J. *et al.* (2008) Immunophenotypic changes of human articular chondrocytes during monolayer culture reflect *bona fide* dedifferentiation rather than amplification of progenitor cells. [J Cell Physiol. 214: 75-83.](#)
  4. Pilling, D. *et al.* (2009) Identification of markers that distinguish monocyte-derived fibrocytes from monocytes, macrophages, and fibroblasts. [PLoS One. 4 \(10\): e7475.](#)
  5. Manini, I. *et al.* (2020) Heterogeneity Matters: Different Regions of Glioblastoma Are Characterized by Distinctive Tumor-Supporting Pathways. [Cancers \(Basel\). 12 \(10\)Oct 13 \[Epub ahead of print\].](#)
  6. Glynn, E. & Fromm, J.R. (2020) Immunophenotypic Characterization and Purification of Neoplastic Cells from Lymph Nodes Involved by T-Cell/Histiocyte-rich Large B-cell Lymphoma by Flow Cytometry and Flow Cytometric Cell Sorting. [Cytometry B Clin Cytom.](#)

[98 \(1\): 88-98.](#)

7. Caponnetto, F. *et al.* (2020) Human Adipose-Derived Stem Cells in Madelung's Disease: Morphological and Functional Characterization. [Cells. 10 \(1\): 44.](#)

8. Kirolos, S.A. and Gomer, R.H. (2022) The extracellular sialidase NEU3 induces neutrophil priming [bioRxiv. 24 Feb \[Epub ahead of print\].](#)

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<b>Storage</b>	Store at +4°C. DO NOT FREEZE. This product should be stored undiluted.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #20471 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1556SBY665">https://www.bio-rad-antibodies.com/SDS/MCA1556SBY665</a> 20471
<b>Regulatory</b>	For research purposes only

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## Related Products

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto:antibody_sales_uk@bio-rad.com)

**Europe**

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: [antibody\\_sales\\_de@bio-rad.com](mailto:antibody_sales_de@bio-rad.com)

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

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