

Datasheet: MCA1556SBV475

Description:	MOUSE ANTI HUMAN CD10:StarBright Violet 475		
Specificity:	CD10		
Other names:	CALLA		
Format:	StarBright Violet 475		
<b>Product Type:</b>	Monoclonal Antibody		
Clone:	SN5c		
Isotype:	lgG1		
Quantity:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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 conjugate	Purified IgG conjugated to StarBright Violet 475 - liquid			
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm		
	StarBright Violet 475	405	479		
Preparation	Purified IgG prepared supernatant	by affinity chromatog	raphy on Protein A		
	•		raphy on Protein A		
Buffer Solution	supernatant	aline	raphy on Protein A		
Buffer Solution Preservative	supernatant  Phosphate buffered s	aline (NaN <sub>3</sub> )	raphy on Protein A		
Buffer Solution Preservative	Phosphate buffered s	aline (NaN <sub>3</sub> )	raphy on Protein A		
Buffer Solution  Preservative Stabilisers	Phosphate buffered s  0.09% sodium azide ( 1% bovine serum alb	aline (NaN <sub>3</sub> )	raphy on Protein A		

# Approx. Protein Concentrations

For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.

#### **Immunogen**

Partially purified cell membrane antigens from fresh leukemia cells

## **External Database**

Links

#### **UniProt:**

P08473 Related reagents

#### **Entrez Gene:**

4311 MME Related reagents

#### **Synonyms**

**EPN** 

#### **Fusion Partners**

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

## **Specificity**

Mouse anti Human CD10 antibody, clone SN5c recognizes human neprilysin, also known as CD10, atriopeptidase, 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).

## **Flow Cytometry**

Use  $5\mu$ I of the suggested working dilution to label  $10^6$  cells in  $100\mu$ I. Best practices suggest a 5 minutes centrifugation at 6,000g prior to sample application.

#### 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. <u>Leuk Res. 13 (8):</u> 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. <u>PLoS One. 4 (10): e7475.</u>
- 5. Manini, I. *et al.* (2020) Heterogeneity Matters: Different Regions of Glioblastoma Are Characterized by Distinctive Tumor-Supporting Pathways. <u>Cancers (Basel). 12 (10)Oct 13 [Epub ahead of print].</u>
- 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].

Storage	Store at +4°C.
	DO NOT FREEZE.
	This product should be stored undiluted.
Guarantee	12 months from date of despatch
Acknowledgements	This product is covered by U.S. Patent No. 10,150,841 and related U.S. and fore counterparts

**Health And Safety** Information

Material Safety Datasheet documentation #20471 available at:

https://www.bio-rad-antibodies.com/SDS/MCA1556SBV475

20471

Regulatory For research purposes only

## Related Products

## **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) **HUMAN SEROBLOCK (BUF070B)** 

North & South Tel: +1 800 265 7376 America Fax: +1 919 878 3751 Worldwide

Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Europe

Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50

Email: antibody\_sales\_us@bio-rad.com

Email: antibody\_sales\_uk@bio-rad.com

Email: 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 'M435023:250224'

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