

Datasheet: MCA1556AMO

Description:	MOUSE ANTI HUMAN CD10:Amethyst Orange		
Specificity:	CD10		
Other names:	CALLA		
Format:	Amethyst Orange		
Product Type:	Monoclonal Antibody		
Clone:	SN5c		
Isotype:	IgG1		
Quantity:	0.1 mg		

# **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	ed to Amethyst Orang	e - liquid	
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm	1)
	Amethyst Orange	405	540	
Preparation	Purified IgG prepared supernatant	by affinity chromatog	raphy on Protein A	from tissue culture
Buffer Solution	Phosphate buffered sa	aline		
Preservative	0.09% sodium azide (	NaN <sub>3</sub> )		
Stabilisers	1% bovine serum albu	umin		
Approx. Protein Concentrations	IgG concentration 0.1	mg/ml		

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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 10µl of the suggested working dilution to label 10<sup>6</sup> cells in 100µl

#### 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**

This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch	
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA1556AMO">https://www.bio-rad-antibodies.com/SDS/MCA1556AMO</a> 10041	
Regulatory	For research purposes only	

# Related Products

# **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL: Amethyst Orange (MCA928AMO)

## **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

Fax: +1 919 878 3751

North & South Tel: +1 800 265 7376

America

Worldwide

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

Email: 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M410071:221024'

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