Datasheet: MCA2520F

Description:	MOUSE ANTI HUMAN CD65s:FITC
Specificity:	CD65s
Other names:	CDw65
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	VIM-2
Isotype:	IgM
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			neat - 1/10

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 IgM conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
FITC	490	525

Preparation

Purified IgM prepared by ammonium sulphate precipitation.

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers

0.09% Sodium Azide (NaN_3)
1% Bovine Serum Albumin

Approx. Protein Concentrations

IgM concentration 0.1mg/ml

Immunogen

THP1 (human acute monocytic leukaemia cells)

Fusion Partners

Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.

Specificity

Mouse anti Human CD65s antibody, clone VIM-2 selectively recognizes the sialylated form of

	human CD65, known as CD65s (VIM-2 antigen), a leucocyte carbohydrate antigen expressed by granulocytes, monocytes and leukaemic cells of myelomonocytic lineage. CD65s is aberrantly expressed on some acute myeloid leukaemias (AML) and clone VIM-2 has been reliably used as a marker for distinguishing between mature and undifferentiated AML. During normal myelopoiesis, expression of CD65s follows the disappearance of the progenitor antigen CD34. Cross-linking of the CD65s antigen using clone VIM-2, has been shown to induce phagocyte cytoplasmic calcium flux, oxidative burst and degranulation (Lund-Johansen *et al.* 1992).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
References	1. Gooi, H.C. *et al.* (1985) Differences in the fine specificities of monoclonal (Class A) antibodies to human myeloid cells. Clin Exp Immunol. 60 (1): 151-8. 2. Lund-johansen, F. *et al.* (1992) Activation of human phagocytes through carbohydrate antigens (CD15, sialyl-CD15, CDw17, and CDw65). J Immunol. 148 (10): 3221-9. 3. Knapp, W. *et al.* (1994) Flow cytometric analysis of cell-surface and intracellular antigens in leukemia diagnosis. Cytometry. 18 (4): 187-98. 4. Lund-johansen, F. *et al.* (1990) Flow cytometric assay for the measurement of human bone marrow phenotype, function and cell cycle. Cytometry. 11 (5): 610-6. 5. Bengtson, P. *et al.* (2002) Polymorphonuclear Leukocytes from Individuals Carrying the G329A Mutation in the α1,3-Fucosyltransferase VII Gene (FUT7) Roll on E- and P-Selectins J Immunol. 169: 3940-6. 6. Buffone, A. *et al.* (2013) Silencing α1,3-fucosyltransferases in human leukocytes reveals a role for FUT9 during E-selectin mediated cell adhesion. J Biol Chem. 288: 1620-33. 7. Nakayama, F. *et al.* (2001) CD15 expression in mature granulocytes is determined by alpha 1,3-fucosyltransferase IX, but in promyelocytes and monocytes by alpha 1,3-fucosyltransferase IV. J Biol Chem. 276: 16100-6. 8. Rao, R.M. *et al.* (2001) The S128R polymorphism of E-selectin mediates neuraminidase-resistant tethering of myeloid cells under shear flow. Eur J Immunol. 32: 251-60. 9. Paietta, E. *et al.* (2003) Low expression of the myeloid differentiation antigen CD65s, a feature of poorly differentiated AML in older adults: study of 711 patients enrolled in ECOG trials. Leukemia. 17: 1544-50. 10. Bengtson, P. *et al.* (2001) Identification of a missense mutation (G329A;Arg(110)--> GLN) in the human FUT7 gene. J Biol Chem. 276: 31575-82. 11. Oehler, L. *et al.* (1998) Neutrophil granulocyte-committed cells can be driven to acquire dendritic cell characteristics. J Exp Med. 187: 1019-28.
Storage	Store at +4°C or at -20°C if preferred. Storage in frost-free freezers is not recommended. This product should be stored undiluted. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Shelf Life	18 months from date of despatch.
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: 10041: https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

MOUSE IgM NEGATIVE CONTROL:FITC (MCA692F)

Recommended Useful Reagents

HUMAN SEROBLOCK (BUF070A)
HUMAN SEROBLOCK (BUF070B)

North & South America	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: 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	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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