

## Datasheet: MCA2520F

<b>Description:</b>	MOUSE ANTI HUMAN CD65s:FITC
<b>Specificity:</b>	CD65s
<b>Other names:</b>	CDw65
<b>Format:</b>	FITC
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	VIM-2
<b>Isotype:</b>	IgM
<b>Quantity:</b>	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](http://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.

<b>Target Species</b>	Human		
<b>Product Form</b>	Purified IgM conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	FITC	490	525
<b>Preparation</b>	Purified IgM prepared by ammonium sulphate precipitation.		
<b>Buffer Solution</b>	Phosphate buffered saline		
<b>Preservative</b>	0.09% Sodium Azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% Bovine Serum Albumin		
<b>Approx. Protein Concentrations</b>	IgM concentration 0.1mg/ml		
<b>Immunogen</b>	THP1 (human acute monocytic leukaemia cells).		
<b>Fusion Partners</b>	Spleen cells from immunised Balb/c mice were fused with cells of the mouse NS-1 myeloma cell line.		
<b>Specificity</b>	<b>Mouse anti Human CD65s antibody, clone VIM-2</b> 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](#)).

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**Flow Cytometry** Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**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  $\alpha$ 1,3-Fucosyltransferase VII Gene (FUT7) Roll on E- and P-Selectins [J Immunol. 169: 3940-6.](#)
6. Buffone, A. *et al.* (2013) Silencing  $\alpha$ 1,3-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.](#)

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**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.

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**Shelf Life** 18 months from date of despatch.

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at: 10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

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**Regulatory** For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgM NEGATIVE CONTROL:FITC \(MCA692F\)](#)

### Recommended Useful Reagents

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

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

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