

# Anti-Human CD15 (MCS-1)

	<b>REF</b>			
PURE	15PU	1 mg	1 mg/ml	<b>RUO</b>
APC	15A-100T	100 test	20 µL/test 2 mg/ml	

## 1. PRODUCT DESCRIPTION

**Clone:** MCS-1;  
**Isotype:** IgG3;  
**Tested application:** flow cytometry;  
**Immunogen:** The anti-CD15 monoclonal antibody derives from white blood cells;  
**Species reactivity:** Human;  
**Storage instruction:** store in the dark at 2-8 °C;  
**Storage buffer:** aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN<sub>3</sub>);  
**Recommended usage:** Immunostep's CD15, clone MCS-1 is a monoclonal antibody intended for the identification and enumeration of human neutrophils, monoblastoid precursor cells of the myeloid lineage, eosinophils, and some monocytes, but not on basophils and lymphocytes using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10<sup>6</sup> cells;  
**Presentation:** liquid;  
**Source:** Supernatant proceeding from an in vitro cell culture of a cell hybridoma;  
**Purification:** Affinity chromatography;  
**Other names:** 3-FAL antibody, Alpha-3-fucosyltransferase antibody, ELAM 1 ligand antibody;  
**Gene ID:** 2526;  
**Molecular weight:** 105, 135, 165, 185, 220 kDa.

## 2. ANTIGEN DETAILS

**Large description:** The monoclonal antibody is directed against the CD15- antigen (the FAL structure) of human polymorphonuclear cells. The monoclonal antibody reacts with the promyelocytes, myelocytes and polymorphonuclear cells. After neuraminidase treatment of cells the FAL structure is expressed on all cells of the monocytic and myelocytic lineage. This monoclonal antibody does not react with platelets and cells of the T and B lymphocyte lineage.<sup>(1-4)</sup>

## 3. WARRANTY

Warranted only to conform to the quantity and contents stated on the label or in the product labelling at the time of delivery to the customer. Immunostep disclaims hereby other warranties.

Immunostep's sole liability is limited to either the replacement of the products or refund of the purchase price.

## 4. ADDITIONAL INFORMATION

For research use only. Not for diagnostic use.

Not for resale. Immunostep will not be responsible of violations that may occur with the use of this product. Any use of this product other than the specified in this document is strictly prohibited.

Unless otherwise indicated by Immunostep by written authorization, this product is intended for research only and is not to be used for any other purpose, including without limitation, for human or animal diagnostic, therapeutic or commercial purposes.

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## 5. PROTOCOL

### ■ Direct Immunofluorescence Cell Surface Staining Protocol

1. Transfer 100 µl (10<sup>6</sup> cells/test) of the sample to a 12 x 75 mm polystyrene test tube.
2. Add the suggested volume indicated on the antibody vial to the 12x75 mm cytometer tube.
3. Mix well and incubate in the dark at room temperature at 4 °C for 30 minutes or at room temperature (20-25 °C) for 15 minutes.
4. After the incubation period, add 1,5 ml of an erythrocyte-lysing solution and mix. Incubate at room temperature in the darkness (the blood should be well mixed with the lysing solution).
5. Centrifuge tubes at 540xg for 5 minutes. The supernatant is removed with a Pasteur pipette or with a vacuum pump.
6. Resuspend and wash with 3-5 mL of PBS at 540xg for 5 min.
7. After removing the supernatant and resuspending the cell pellet, add 300 µL of PBS and acquire on the flow cytometer are recorded.
8. Analyse on a flow cytometer or store at 2- 8 °C in the dark until analysis. Samples can be run up to 24 hours after lysis.






### ■ Indirect Immunofluorescence Cell Surface Staining Protocol

1. Transfer 100 µl (10<sup>6</sup> cells/test) of the sample to a 12 x 75 mm polystyrene test tube
2. Add purified reagent according to manufacturer's recommendation and mix gently with a vortex mixer.
3. Incubate in the dark at room temperature at 4 °C for 30 minutes or at room temperature (20-25 °C) for 15 minutes.
4. Add 2 mL 0.01 mol/L PBS (It betters that it containing 2% bovine serum albumin) and resuspend the cells by using a vortex mixer. Centrifuge at 540xg for 5 min in order to remove the McAb not bound to its antigen.
5. Add a secondary conjugated reagent with some fluorochrome and mix. Incubate at room temperature for 15 min in the dark. The absence of light is necessary as the fluorochrome is photoinstability.
6. After the incubation period, add 1,5 ml of an erythrocyte-lysing solution and mix. Incubate at room temperature in the darkness (the blood should be well mixed with the lysing solution). Centrifuge at 540xg for 5 minutes. The supernatant is removed with a Pasteur pipette or with a vacuum pump.
7. Resuspend and a made a final wash with 3-5 mL of PBS at 540xg for 5 min.
8. After removing the supernatant and resuspending the cell pellet, add 300 µL of PBS and acquire on the flow cytometer are recorded.
9. Analyse on a flow cytometer or store at 2- 8 °C in the dark until analysis. Samples can be run up to 24 hours after lysis.

## 6. REFERENCES

1. Civin CI, Mirro J, Banquerigo ML. My-1, new myeloid-specific antigen identified by a mouse monoclonal antibody. *Blood*1981 May;57(5):842-5.
2. Majdic O, Liszka K, Lutz D, Knapp W. Myeloid differentiation antigen defined by a monoclonal antibody. *Blood*1981 Dec;58(6):1127-33.
3. Howie AJ, Brown G, Fisher AG, Khan M. Widespread distribution in human tissues of an antigenic determinant of granulocytes. *J Clin Pathol*1984 May;37(5):555-9.
4. Orfao A, Chillon MC, Bortoluci AM, Lopez-Berges MC, Garcia-Sanz R, Gonzalez M, et al. The flow cytometric pattern of CD34, CD15 and CD13 expression in acute myeloblastic leukemia is highly characteristic of the presence of PML-RARalpha gene rearrangements. *Haematological*1999 May;84(5):405-12.

## 7. EXPLANATION OF SYMBOLS

	Form
<b>REF</b>	Catalog reference
	Contains sufficient for <n> test
	Regulatory Status
	Quantity per test
<b>RUO</b>	Research Use Only
	Manufacturer

## 8. MANUFACTURED BY:

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