Anti-Human CD36 (CLB-IVC7)

	REF	Σ		[A]	
FITC	36F2-100T	100 test	20 µL/test	2 mg/ml	RUO
PerCP-Cyanine 5.5	36PP5.52-100T	100 test	5 µL/test	0,05 mg/ml	
CF-Blue	36CFB2-100T	100 test	5 µL/test	0,05 mg/ml	

1. PRODUCT DESCRIPTION

Clone: CLB-IVC7;
Isotype: IgG1;
Tested application: flow cytometry;
Immunogen: The CD36 antibody, clone CLB-IVC7, is derived from the hybridization of Sp2/0 mouse myeloma cells with spleen cells isolated from BALB/c mice immunized with human monocytes;
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_3);
Recommended usage: Immunostep's CD36, cloneCLB-IVC7, is a monoclonal antibody intended for the identification and enumeration of platelets, macrophages, endothelial cells, early erythroid cells and megakaryocytes using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10^6 cells;
Presentation: liquid;
Source: Supernatant proceeding from an in vitro cell culture of a cell hybridoma;
Purification: Affinity chromatography;
Other names: GPIV, GP4, GP3B, thrombospondin receptor, PASIV, FAT, and SCARB3;
Gene ID: 948;
Molecular weight: 88 kDa.

2. ANTIGEN DETAILS

Large description: CD36 is a transmembrane, highly glycosylated, glycoprotein expressed by monocytes, macrophages, platelets, microvascular endothelial cells, early erythroid cells and megakaryocytes and adipose tissues and weak with B cells. Detection of CD36 on human blood T cells is spurious, due mainly to interaction with contaminating platelets which express CD36 robustly5.

Platelet glycoprotein IV (GP IV)(GPIIIb) (CD36 antigen) is also called GPIV, OKM5-antigen or PASIV. CD36 recognises oxidized low density lipoprotein, long chain fatty acids, anionic phospholipids, collagen types I, IV and V, thrombospondin (TSP) and Plasmodium falciparum infected erythrocytes. Binds long chain fatty acids and may function in the transport and/or as a regulator of fatty acid transport.[1-4]

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.

Please, refer to www.immunostep.com technical support for more information.

Revision N° 7 | Emission date: 09/02/2021

5. PROTOCOL

Direct Immunofluorescence Cell Surface Staining Protocol

1. Transfer 100 ul (106 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 adquire 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 ul (106 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 adquire 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. Alessio M, Ghigo D, Garbarino G, Geuna M, Malavasi F. Analysis of the human CD36 leucocyte differentiation antigen by means of the monoclonal antibody NL07. Cell Immunol1991 Oct 15;137(2):487-500.
2. Alessio M, Roggero S, Bussolino F, Saitta M, Malavasi F. Characterization of the murine monoclonal antibody NL07 specific for the human thrombospondin receptor (CD36 molecule). Curr Stud Hematol Blood Transfus1991(58):182-6.
3. Alessio M, Greco NJ, Primo L, Ghigo D, Bosia A, Tandon NN, et al. Platelet activation and inhibition of malarial cytoadherence by the anti-CD36 IgM monoclonal antibody NL07. Blood1993 Dec 15;82(12):3637-47.
4. Gruarin P, Ulliers D, Thorne RF, Alessio M. Methionine 156 in the immunodominant domain of CD36 contributes to define the epitope recognized by the NL07 MoAb. Mol Cell Biochem2000 Nov;214(1-2):89-95.
5. Zamora C, Cantó E, Nieto JC, Ortiz MA, Diaz-Torné C, Diaz-Lopez C, Llobet JM, Juarez C, Vidal S. Functional consequences of platelet binding to T lymphocytes in inflammation. J Leukoc Biol. 2013 Sep;94(3):521-9. doi: 10.1189/jlb.0213074. Epub 2013 Jun 25. PMID: 23801652.

7. EXPLANATION OF SYMBOLS

	Form
REF	Catalog reference
Σ	Contains sufficient for > test
	Quantity per test
	Regulatory Status
RUO	Research Use Only
[A]	Concentration
	Manufacturer

8. MANUFACTURED BY:

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