Anti-Human CD2 (TP1/31)

	REF	Σ		
PURE	2PU	1 mg	1 mg/ml	
APC	2A-100T	100 test	0,05 mg/ml	RUO
FITC	2F-100T	100 test	0,05 mg/ml	
PE	2PE-100T	100 test	0,05 mg/ml	

1. PRODUCT DESCRIPTION

Clone: TP1/31;
Isotype: IgG1;
Tested application: flow cytometry;
Immunogen: The anti-CD2 monoclonal antibody derives from PMA and Ionomycin activated T cells blast (human);
Species reactivity: Human;
Storage instruction: store in the dark at 2-8 °C; Store in the dark at 2-8 °C. It does not affect purified.
Storage buffer: aqueous buffered solution containing protein stabilizer and 0.09% sodium azide (NaN_3);
Recommended usage: Immunostep's CD2, clone TP1/31[1, 2], is a monoclonal antibody intended for the identification and enumeration of human peripheral T lymphocytes and 90% of the thymocytes 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**: T11, LFA-2, CD2R, E-rosette receptor, Erythrocyte receptor, LFA-3 receptor, Rosette receptor, T-cell surface antigen T11/Leu-7;

Gene ID: 914;
Molecular weight: 50 kDa.

2. ANTIGEN DETAILS

Large description: The TP1/31 monoclonal antibody is directed against the CD2-antigen, which is expressed on human T lymphocytes. The monoclonal antibody reacts with all human peripheral T lymphocytes and 90% of the thymocytes[3-5]. The monoclonal antibody blocks the rosette-formation of human T lymphocytes with sheep erythrocytes.

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.

5. REFERENCES

1. McMichael AJ. Leucocyte typing III: white cell differentiation antigens. Oxford: Oxford University Press; 1987.
2. Mason D. Leucocyte typing VII: white cell differentiation antigens proceedings of the Seventh International Workshop and Conference held in Harrogate, United Kindom. Oxford: Oxford University Press; 2002.
3. Orfao A, Ciudad J, Gonzalez M, Lopez A, del Mar Abad M, Paz Bouza JI, et al. Flow cytometry in the diagnosis of cancer. Scand J Clin Lab Invest Suppl1995;221:145-52.
4. Kaleem Z, White G, Zutter MM. Aberrant expression of T-cell-associated antigens on cell non-Hodgkin lymphomas. Am J Clin Pathol2001 Mar;115(3):396-403.
5. Thalhammer-Scherrer R, Mitterbauer G, Simonitsch I, Jaeger U, Lechner K, Schneider B, et al. The immunophenotype of 325 adult acute leukemias: relationship to morphologic and molecular classification and proposal for aminimal creening program highly predictive for lineage discrimination Am J Clin Pathol 2002 Mar; 117(3):380-9.

6. 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). Centrifuge tubes at 540xg for 5 minutes. The supernatant is removed with a Pasteur pipette or with a vacuum pump.
5. Resuspend and wash with 3-5 mL of PBS at 540xg for 5 min.
6. After removing the supernatant and resuspending the cell pellet, add 300 µL of PBS and adquire on the flow cytometer are recorded.
7. 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.

7. EXPLANATION OF SYMBOLS

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

8. MANUFACTURED BY: IMMUNOSTEP S.L.

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