# Anti-Human CD300e (IREM-2) (UP-H2)



REF	$\sum_{i=1}^{n}$	$\bigcirc$	[A]	
IREM2PU	l mg	10 µL/test	1 mg/ml	
IREM2PE-100T	100 test	20 µL/test	0,05 mg/ml	
IREM2AC750-100T	100 test	5 µL/test	0,2 mg/ml	RUO
IREM2PPC5.5-100T	100 test	5 µL/test	0,2 mg/ml	
	IREM2PU IREM2PE-100T IREM2AC750-100T	IREM2PU 1 mg IREM2PE-100T 100 test IREM2AC750-100T 100 test	IREM2PU I mg IO µL/test IREM2PE-100T 100 test 20 µL/test IREM2AC750-100T 100 test 5 µL/test	IREM2PU I mg IO μL/test I mg/ml   IREM2PE-IOOT 100 test 20 μL/test 0,05 mg/ml   IREM2AC750-IOOT 100 test 5 μL/test 0,2 mg/ml

### 1. PRODUCT DESCRIPTION

Clone: UP-H2:

Isotype: IqG1;

Tested application: flow cytometry;

Immunogen: The anti-IREM2 monoclonal antibody derives from IREM-2-HA-transfected 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\_):

Recommended usage: Immunostep's IREM-2, clone UP-H2, is a monoclonal antibody intended for the identification and enumeration of human sample lymphocytes that express IREM2 using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using I 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: CD300e, alfa-mar, mar, CMRF35-like molecule 2, CLM-2, CD300 antigenlike family member E, CMRF35-A5, Immune receptor expressed on myeloid cells 2, Polymeric immunoglobulin receptor 2, PIgR-2, Poly-Ig receptor 6; Gene ID: 342510;

Molecular weight: 34 kDa.

#### 2. ANTIGEN DETAILS

Large description: This antibody reacts with the CD300e antigen, which is specific for monocytes and myeloid dendritic cell line. In normal peripheral blood should be positive for 80% of monocytes. This antibody can be used to classify different types of myeloid leukemias, especially with monocytic components. Monoclonal antibody anti-IREM2 of Immunostep can be used to classify different types of myeloid leukemias, especially monocytic line.<sup>(1-4)</sup>

#### З. 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.

### ADDITIONAL INFORMATION 4

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

## PROTOCOL

5.

.

### 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  $\mu$ L 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 DUMD.
- 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.

# REFERENCES

6.

- 1 Brckalo T, Calzetti F, Perez-Cabezas B, Borras FE, Cassatella MA, Lopez-Botet M. Functional analysis of the CD300e receptor in human monocytes and myeloid dendritic cells. Eur J Immunol Mar;40(3):722-32.
- 2. van Dongen JJ, Lhermitte L, Bottcher S, Almeida J, van der Velden VH, Flores-Montero J, et al. EuroFlow antibody panels for standardized n-dimensional flow cytometric immunophenotyping of normal, reactive and malignant leukocytes. Leukemia Sep;26(9):1908-75.
- З. Aguilar H, Alvarez-Errico D, Garcia-Montero AC, Orfao A, Sayos J, Lopez-Botet M. Molecular characterization of a novel immune receptor restricted to the monocytic lineage. J Immunol2004 Dec 01;173(11):6703-11.
- Clark GJ, Jamriska L, Rao M, Hart DN. Monocytes immunoselected via the novel 4. monocyte specific molecule, CD300e, differentiate into active migratory dendritic cells. J Immunother2007 Apr;30(3):303-11.

### 7. EXPLANATION OF SYMBOLS

<b>\</b> ∎∕	Form
REF	Catalog reference
$\sum$	Contains sufficient for > test
$\bigcirc$	Quantity per test
	Regulatory Status
RUO	Research Use Only
[A]	Concentration
	Manufacturer



MANUFACTURED BY:

8

### IMMUNOSTEP S.L.

E-mail<sup>.</sup>



Address: Avda, Universidad de Coimbra, s/n Cancer Research Center (C.I.C) Campus de Unamuno 37007 Salamanca (Spain) Telf./fax: (+34) 923 294 827 info@immunostep.com www.immunostep.com