# Anti-Human CD146 (TEA1/34)













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#### 1. PRODUCT DESCRIPTION

Clone: TEA1/34;

Isotype: IgG2a;

Tested application: flow cytometry;

**Immunogen**: The anti-CDI46 monoclonal antibody derives from T cells from human endothelial cells HUVECs;

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 CD146, clone TEAI/34, is a monoclonal antibody intended for the identification and enumeration of MUCIB/MCAM antigen, an activation antigen of human T lymphocytes using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for IO6 cells;

Presentation: liquid;

Source: Supernatant proceeding from an in vitro cell culture of a cell hybridoma;

Purification: Affinity chromatography;

Other names: S- Endo, Cell surface glycoprotein MUC20;

Gene ID: 4162:

Molecular weight: 118 kDa.

# 2. ANTIGEN DETAILS

Large description: This antibody reacts with the CDI46 antigen, which is expressed on melanoma cells, epithelial cells, endothelial cells, fibroblasts, activated T cells, multipotent mesenchymal stromal cells, and activated keratinocytes. CDI46 mediates heterophilic cell adhesion and regulates monocyte transendothelial migration. The ligand of CDI46 remains to be identified. Among peripheral whole blood leucocytes, CDI46 expression is not detected, except on a subset of activated T-lymphocytes.<sup>[1-4]</sup>

#### WARRANTY

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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.

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## 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
- Add the suggested volume indicated on the antibody vial to the 12x75 mm cytometer tube.
- 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.
- 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.
- 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
- 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.
- 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.
- Add a secondary conjugated reagent with some fluorochrome and mix. Incubate
  at room temperature for I5 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  $\mu L$  of PBS and adquire on the flow cytometer are recorded.
- 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

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- Anfosso F, Bardin N, Frances V, Vivier E, Camoin-Jau L, Sampol J, et al. Activation of human endothelial cells via S-endo-l antigen (CD146) stimulates the tyrosine phosphorylation of focal adhesion kinase p125(FAIK). J Biol Chem1998 Oct 09;273(41):26852-6.
- Bardin N, Anfosso F, Masse JM, Cramer E, Sabatier F, Le Bivic A, et al. Identification of CDI46 as a component of the endothelial junction involved in the control of cell-cell cohesion. Blood2001 Dec 15;98(13):3677-84.
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   as the target antigen of a human monoclonal antibody that recognizes both epithelioid
   and sarcomatoid types of mesothelioma. Cancer Res2009 Feb 15;69(4):1570-7.

## 7. EXPLANATION OF SYMBOLS

	Form
REF	Catalog reference
$\sum$	Contains sufficient for <n> test</n>
$\Diamond$	Quantity per test
	Regulatory Status
RUO	Research Use Only
<b></b>	Manufacturer
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## MANUFACTURED BY:



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