

Anti-Human CD147 (VJ1/9)

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PURE	I47PU1	1 mg	10 µL/test	1 mg/ml	
FITC	I47FI-100T	100 test	20 µL/test	0,05 mg/ml	
PE	I47PEI-100T	100 test	20 µL/test	0,05 mg/ml	

1. PRODUCT DESCRIPTION

Clone: VJ1/9;
Isotype: IgG1;
Tested application: flow cytometry;
Immunogen: The anti-CD147 monoclonal antibody derives from activated HUVEC cells;
Species reactivity: Human;
Storage instruction: 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 (NaN₃);
Recommended usage: Immunostep's CD147, clone VJ1/9, is a monoclonal antibody intended for the identification and enumeration of leukocytes, erythrocytes, platelets, and endothelial cells using flow cytometry. This reagent is effective for direct immunofluorescence staining of human tissue for flow cytometric analysis using 1 test for 10⁶ cells;
Presentation: liquid;
Source: Supernatant proceeding from an in vitro cell culture of a cell hybridoma;
Purification: Affinity chromatography;
Other names: Neurothelin, Basigin, EMMPRIN;
Gene ID: 682;
Molecular weight: 50 - 65 kDa.

2. ANTIGEN DETAILS

Large description: This antibody reacts with the CD147 antigen which reacts with Basigin or Neurothelin, a transmembrane glycoprotein (50-60kd) of the immunoglobulin super-gene family. Neurothelin is a molecule which is broadly expressed on cells of hematopoietic and non-hematopoietic origin but primarily expressed on leukocytes, erythrocytes, platelets, and endothelial cells. Neurothelin is a blood brain barrier-specific molecule. Its expression on specific cell types may be regulated by cytokines. CD147 is reported to have a function during embryonal brain development and/or play a role in integrin-mediated adhesion in brain endothelia.^[1-5]

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. PROTOCOL

■ Direct Immunofluorescence Cell Surface Staining Protocol

1. Transfer 100 µl (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 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 (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 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. Gao J, Hu Z, Liu J, Liu D, Wang Y, Cai M, et al. Expression of CD147 and Lewis y antigen in ovarian cancer and their relationship to drug resistance. Med Oncol May;31(5):920.
2. Sudou A, Ozawa M, Muramatsu T. Lewis X structure increases cell substratum adhesion in L cells. J Biochem1995 Feb;117(2):271-5.
3. Fadool JM, Linser PJ. Evidence for the formation of multimeric forms of the 5A11/HT7 antigen. Biochem Biophys Res Commun1996 Dec 04;229(1):280-6.
4. Ikeda E, Flamme I, Risau W. Developing brain cells produce factors capable of inducing the HT7 antigen, a blood-brain barrier-specific molecule, in chick endothelial cells. Neurosci Lett1996 May 17;209(3):149-52.
5. Schuster VL, Lu R, Kanai N, Bao Y, Rosenberg S, Prie D, et al. Cloning of the rabbit homologue of mouse 'basigin' and rat 'OX-47': kidney cell type-specific expression, and regulation in collecting duct cells. Biochim Biophys Acta1996 Mar 27;1311(1):13-9.

7. EXPLANATION OF SYMBOLS

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

8. MANUFACTURED BY:



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