Technical Data Sheet

Anti-Human CD49d Purified

Catalog Number :11511-20

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information

Clone: 9F10

Format/Conjugate: Purified

Concentration: 0.5 mg/mL

Reactivity: Human

Laser: Not Applicable

Peak Emission: Not Applicable

Peak Excitation: Not Applicable

Filter: Not Applicable

Brightness (1=dim,5=brightest): Not Applicable

Isotype: Mouse IgG1, kappa

Formulation: Phosphate-buffered aqueous solution, ≤0.09% Sodium azide, may contain carrier protein/stabilizer, ph7.2.

Storage: Product should be kept at 2-8°C.

Applications: FC, IHC

Description

The 9F10 monoclonal antibody specifically reacts with human CD49d, the 150 kDA alpha 4 integrin chain. The molecule forms the heterodimer called VLA-4 with integrin beta 1 and another heterodimer with integrin beta 7 that binds fibronectin, VCAM-1, and MadCAM-1. CD49d is expressed on monocytes, lymphocytes, thymocytes, NK cells, B cells, and T cells. It is involved in hematopoietic stem cell differentiation, cell migration, and cell activation. Its absence on Foxp3+ cells make it a useful marker to isolate Treg cell populations.

Preparation & Storage

The product should be stored undiluted at 4°C. Do not freeze. The monoclonal antibody was purified utilizing affinitychromatography.

Application Notes

The antibody has been analyzed for quality through the flow cytometric analysis of the relevant cell type. It is recommended that the reagent be titrated for optimal performance for each application.

References

1.Schlossman, S. F. (1995).;Leucocyte typing V: White cell differentiation antigens: Proceedings of the Fifth International Workshop and Conference, Held in Boston, USA 3-7 November, 1993. Oxford University Press.

2. Kleinewietfeld, M., Starke, M., Di Mitri, D., Borsellino, G., Battistini, L., Rötzschke, O., Falk, K. (2009). CD49d provides access to “untouched” human Foxp3+ Treg free of contaminating effector cells.;Blood,;113(4), 827-836.

3. Hemler, M. E. (1990). VLA proteins in the integrin family: structures, functions, and their role on leukocytes.;Annual review of immunology,;8(1), 365-400.

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