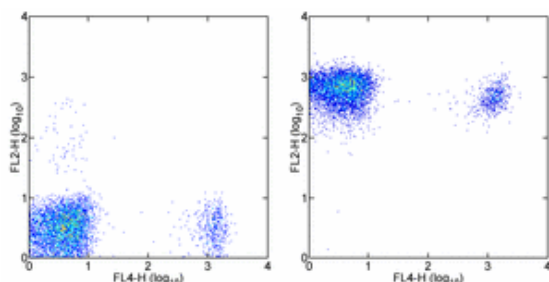


Anti-Human CD46 PE

Catalog Number: 12-0469

Also Known As: MCP, TRA2.10

RUO: For Research Use Only



Staining of normal human peripheral blood cells with Anti-Human CD19 APC (cat. 17-0199) and Mouse IgG1 κ Isotype Control PE (cat. 12-4714) (left) or Anti-Human CD46 PE (right). Cells in the lymphocyte gate were used for analysis.

Product Information

Contents: Anti-Human CD46 PE

REF Catalog Number: 12-0469

Clone: 8E2

Concentration: 5 μ l (0.5 μ g)/test

Host/Isotype: Mouse IgG1, κ

Formulation: aqueous buffer, 0.09% sodium azide, may contain carrier protein/stabilizer



Temperature Limitation: Store at 2-8°C. Do not freeze. Light sensitive material.



Batch Code: Refer to Vial



Use By: Refer to Vial



Caution, contains Azide

Description

The 8E2 monoclonal antibody reacts with human CD46 (membrane cofactor protein). CD46 is a transmembrane glycoprotein consisting of four regularly expressed isoforms, giving an electrophoretic profile of two heterogeneous protein species of 51-58 kDa ("lower band") and 59-68 kDa ("upper band"). CD46 is expressed on the majority of nucleated cells, and functions as a regulator of complement function by binding complement components C3b and C4b, which serves to protect the host from autologous complement attack. CD46 has been called a "pathogen magnet" as it is known to play a role in the entry of several pathogens including strains of measles virus, human herpes virus type 6, group A *streptococci* and *Neisseria*.

Cross-linking TCR on naïve human peripheral blood CD4+ T cells together with CD46, rather than CD28, induces more robust proliferation than achieved with stimulation by the costimulatory molecule CD28, as well as other qualitative differences. There is evidence to suggest that stimulation of TCR and CD46 activates natural CD4+CD25+ T regs, which are non-proliferating, but produce high amounts of granzyme A, and kill activated CD4+, CD8+, CD14+ monocytes, immature dendritic cells and mature dendritic cells.

Applications Reported

This 8E2 antibody has been reported for use in flow cytometric analysis.

Applications Tested

This 8E2 antibody has been pre-titrated and tested by flow cytometric analysis of normal human peripheral blood cells. This can be used at 5 μ l (0.5 μ g)/per test. A test is defined as the amount (μ g)/test of antibody that will stain a cell sample in a final volume of 100 μ L. Cell number should be determined empirically but can range from 10^5 to 10^8 cells/test.

References

Adams EM, Brown MC, Nunge M, Krych M, Atkinson JP. Contribution of the repeating domains of membrane cofactor protein (CD46) of the complement system to ligand binding and cofactor activity. *J Immunol.* 1991 Nov 1;147(9):3005-11.

Astier A, Trescol-Biemont MC, Azocar O, Lamouille B, Rabourdin-Combe C. Cutting edge: CD46, a new costimulatory molecule for T cells, that induces p120CBL and LAT phosphorylation. *J Immunol.* 2000 Jun 15;164(12):6091-5.

Grossman WJ, Verbsky JW, Barchet W, Colonna M, Atkinson JP, Ley TJ. Human T regulatory cells can use the perforin pathway to cause autologous target cell death. *Immunity.* 2004 Oct;21(4):589-601.

Related Products

12-4714 Mouse IgG1 K Isotype Control PE

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