

Anti- Human CD4/CD8 (HP2-6/143-44)

Fluorochrome	Reference	Size
FITC/PE	4F18PEI-50T	50 test

PRODUCT DESCRIPTION

Clone: HP2-6, 143-44

Isotype: Mouse IgG2a/ Mouse IgG1

Tested application: flow cytometry

Immunogen: The anti-CD4 monoclonal antibody derives from T cells from leukemic HPB-ALL.

The anti-CD8 monoclonal antibody derives from human T 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 (NaN₃).

Recommended usage: Immunostep's CD4/CD8, is a two-color direct immunofluorescence reagent for enumerating percentages of mature human helper/inducer (CD4+) and suppressor/cytotoxic (CD8+) lymphocytes in erythrocyte-lysed whole blood (LWB). The helper/suppressor ratio (CD4+/CD8+) may also be determined.

Presentation: liquid

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

Purification: Affinity chromatography.

ANTIGEN DETAILS

Large description: Percentages of CD4+ and CD8+ lymphocytes are used in monitoring the immune status of patients with immune deficiency diseases, autoimmune diseases, or immune reactions.

The relative percentage of the CD4 + subset is depressed and the relative percentage of the CD8 + subset is elevated in many patients with congenital or acquired immune deficiencies I such as severe combined immunodeficiency (SCID) and acquired immunodeficiency syndrome (AIDS).

The percentage of suppressor/cytotoxic lymphocytes can be outside the normal reference range in some autoimmune diseases 4 and in certain immune reactions such as acute graft-versus-host disease (GVHD) and transplant rejection. The relative percentage of the CD8 + lymphocyte population may often be decreased in active systemic lupus erythematosus (SLE) but can also be increased in SLE patients undergoing steroid therapy.

The CD4 + /CD8 + (helper/suppressor) lymphocyte ratio, quantified as the ratio of CD4 fluorescein isothiocyanate (FITC)-positive lymphocytes to CD8 phycoerythrin (PE)-positive lymphocytes, has been used to evaluate the immune status of patients with, or suspected of developing, autoimmune disorders or immune deficiencies. In many cases, the relative percentages of helper lymphocytes decline and suppressor lymphocytes increase in immune deficiency states. These states may also be marked by T-cell lymphopenia. In addition, the ratio has been used to monitor bone marrowtransplant patients for onset of acute GVHD. While a useful indicator, the

CD4 + /CD8 + (helper/ suppressor) lymphocyte ratio has specific limitations.⁽¹⁻²⁾

Please, refer to www.immunostep.com technical support for more information.

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.

REFERENCES

1. Giorgi JV. Characterization of T lymphocyte subset alterations by flow cytometry in HIV disease. *Ann N Y Acad Sci.* 1993 Mar 20;677:126-37. doi: 10.1111/j.1749-6632.1993.tb38771.x. PMID: 8494202.
2. Gratama JW, Naipal A, Olijans P, Zwaan FE, Verdonck LF, de Witte T, Vossen JM, Bolhuis RL, de Gast GC, Jansen J. T lymphocyte repopulation and differentiation after bone marrow transplantation. Early shifts in the ratio between T4+ and T8+ T lymphocytes correlate with the occurrence of acute graft-versus-host disease. *Blood.* 1984 Jun;63(6):1416-23. PMID: 6372896.

MANUFACTURED BY



Immunostep S.L.
Avda. Universidad de Coimbra, s/n
Cancer Research Center (CIC)
Campus Miguel de Unamuno
37007 Salamanca (Spain)
Tel. (+34) 923 294 827
www.immunostep.com