

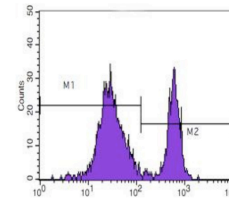
BACKGROUND

CD4 is a member of the Ig gene superfamily. This transmembrane glycoprotein in human is coded for by single gene on the short arm of chromosome 12. It is expressed on subpopulation of mature helper T lymphocytes and majority of immature thymocytes in humans, rats, and mice. In humans, the CD4 marker is also found on monocytes, macrophages, Langerhans cells, eosinophils, endothelial cells of hepatic sinusoids, and sperm cells. The functional importance of such divergent distribution of this molecule is unknown. CD4 plays a decisive role in thymocyte differentiation and participates directly in T cell repertoire selection. It is also involved in recognition of MHC class II antigen on T lymphocytes.¹ It has been proposed that, upon binding MHC class II molecules expressed on APC, the CD4 molecule enhances the responsiveness of the T cell by increasing intercellular avidity and/or by transducing an intracellular signal. In addition, the CD4 molecule is a cellular receptor for HIV.²

References:

1. Sablinski, T. et al: Transplantation 52:579-89, 1991
2. Daar, E.S. et al: Proc. Natl. Acad. Sci. USA 87:6574-78, 1990

QUALITY CONTROL DATA



FACS analysis of blood T cells using CD4 Antibody (M2) and negative control (M1).

TECHNICAL INFORMATION

Source:

CD4 Antibody is a mouse monoclonal antibody raised against purified recombinant human CD4 protein fragment expressed in *E. coli*.

Specificity and Sensitivity:

This antibody detects endogenous CD4 proteins without cross-reactivity with other family members.

Storage Buffer: PBS and 30% glycerol

Storage:

Store at -20°C for at least one year. Store at 4°C for frequent use. Avoid repeated freeze-thaw cycles.

APPLICATIONS

Application:	*Dilution:
WB	1:1,000
ICC	1:50
FACS	1:200-400

*Optimal dilutions must be determined by end user.

