

## 30-1001: Anti-CD4 Monoclonal Antibody (Clone:MEM-115)-Azide free

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	MEM-115
<b>Application :</b>	IP
<b>Reactivity :</b>	Human
<b>Gene :</b>	CD4
<b>Gene ID :</b>	920
<b>Uniprot ID :</b>	P01730
<b>Alternative Name :</b>	CD4
<b>Isotype :</b>	Mouse IgG2a
<b>Immunogen Information :</b>	Human thymocytes and T lymphocytes.

### Description

CD4 is a single chain transmembrane glycoprotein and belongs to immunoglobulin supergene family. In extracellular region there are 4 immunoglobulin-like domains (1 Ig-like V-type and 3 Ig-like C2-type). Transmembrane region forms 25 aa, cytoplasmic tail consists of 38 aa. Domains 1,2 and 4 are stabilized by disulfide bonds. The intracellular domain of CD4 is associated with p56Lck, a Src-like protein tyrosine kinase. It was described that CD4 segregates into specific detergent-resistant T-cell membrane microdomains. Extracellular ligands: MHC class II molecules (binds to CDR2-like region in CD4 domain 1); HIV envelope protein gp120 (binds to CDR2-like region in CD4 domain 1); IL-16 (binds to CD4 domain 3), Human seminal plasma glycoprotein gp17 (binds to CD4 domain 1), L-selectin Intracellular ligands: p56LckCD4 is a co-receptor involved in immune response (co-receptor activity in binding to MHC class II molecules) and HIV infection (human immunodeficiency virus; CD4 is primary receptor for HIV-1 surface glycoprotein gp120). CD4 regulates T-cell activation, T/B-cell adhesion, T-cell differentiation, T-cell selection and signal transduction. Defects in antigen presentation (MHC class II) cause dysfunction of CD4+ T-cells and their almost complete absence in patients blood, tissue and organs (SCID immunodeficiency).

### Product Info

<b>Amount :</b>	0.1 mg
<b>Purification :</b>	Purified by protein-A affinity chromatography
<b>Storage condition :</b>	Store at 2-8°C. Do not freeze.

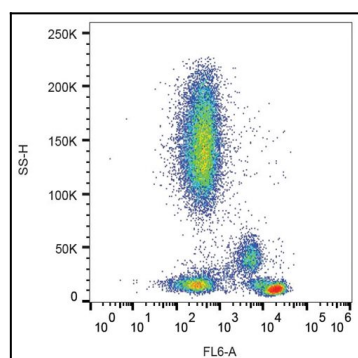


Figure 1: Flow cytometry analysis (surface staining) of human peripheral blood with anti-human CD4 (MEM-115) purified antibody (azide free), GAM-APC.

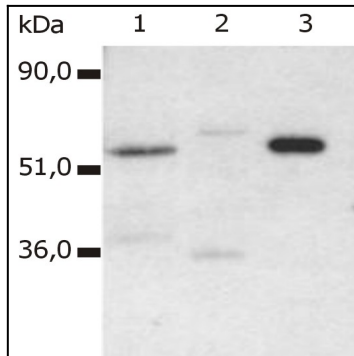


Figure 2: Immunoprecipitation of human CD4 from the lysate T cells isolated from fresh buffy coats. Western blot was immunostained by anti-human CD4 (MEM-241; ). Lane 1: original lysate of T cells. Lane 2: immunoprecipitate by negative control antibody. Lane 3: immunoprecipitate by anti-human CD4 (MEM-115)