

**SM1058RT****Monoclonal Antibody to CD4 - PE**

<b>Alternate names:</b>	T-cell surface antigen T4/Leu-3, T-cell surface glycoprotein CD4
<b>Quantity:</b>	25 Tests
<b>Concentration:</b>	0.1 mg/ml
<b>Background:</b>	CD4 is a 55kD cell surface glycoprotein that is primarily expressed on a subpopulation of T lymphocytes, on peripheral blood monocytes and on tissue macrophages.
<b>Uniprot ID:</b>	<a href="#">P01730</a>
<b>NCBI:</b>	<a href="#">NP_000607.1</a>
<b>GeneID:</b>	<a href="#">920</a>
<b>Host / Isotype:</b>	Mouse / IgG1
<b>Recommended Isotype Controls:</b>	SM10R (for use in human samples)
<b>Clone:</b>	RPA-T4
<b>Immunogen:</b>	Human PHA blasts. Spleen cells from immunised BALB/c mice were fused with cells of the mouse NS1 myeloma cell line.
<b>Format:</b>	<b>State:</b> Lyophilized purified IgG fraction. <b>Purification:</b> Affinity Chromatography on Protein G <b>Buffer System:</b> PBS, pH 7.4 containing 0.09% Sodium Azide as preservative and 1% BSA as stabilizer. <b>Label:</b> PE – R. Phycoerythrin (RPE) <b>Reconstitution:</b> Restore with distilled water
<b>Applications:</b>	Flow Cytometry: Use 10 µl of neat-1/10 diluted antibody to label 10e6 cells or 100 µl of whole blood. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
<b>Specificity:</b>	This antibody recognises CD4. Epitope mapping studies have shown that antibodies, produced by clone RPA-T4, recognise an epitope within domain 1, of the extracellular region, of the CD4 molecule. Clone RPA-T4 has been reported to block gp120-CD4 interaction and inhibit syncytium formation. We recommend the use of SM1058LE for this purpose. <b>Species:</b> Human. Other species not tested.
<b>Storage:</b>	Prior to and following reconstitution store the antibody at 2-8°C. <b>DO NOT FREEZE!</b> This product is photosensitive and should be protected from light. Shelf life: one year from despatch.

**General Readings:**

1. Zarkesh-Esfahani H, Pockley G, Metcalfe RA, Bidlingmaier M, Wu Z, Ajami A, et al. High-dose leptin activates human leukocytes via receptor expression on monocytes. *J Immunol.* 2001 Oct 15;167(8):4593-9. PubMed PMID: 11591788.
2. Voehringer D, Koschella M, Pircher H. Lack of proliferative capacity of human effector and memory T cells expressing killer cell lectinlike receptor G1 (KLRG1). *Blood.* 2002 Nov 15;100(10):3698-702. Epub 2002 Jul 12. PubMed PMID: 12393723.
3. Piatier-Tonneau, D. (1997) CD4 workshop panel report. In *Leucocyte Typing VI. White cell differentiation antigens.* Edited by Kishimoto, T., Kikutani, H., von dem Borne, A.E.G.Kr., Goyert, A.M., Mason, D.Y., Miyasaka, M., Moretta, L., Okumura, K., Shaw, S., Springer, T.A., Sugamura, K., Zola, H. Garland publishing Inc. New York & London.

**Pictures:**

Staining of human peripheral blood lymphocytes with MOUSE ANTI HUMAN CD4:RPE (SM1058R).

