

AM08115RP-N**Monoclonal Antibody to CD4 - PE**

Alternate names:	T-cell surface antigen T4/Leu-3, T-cell surface glycoprotein CD4
Quantity:	0.1 mg
Concentration:	0.1 mg/ml
Background:	CD4 is a single chain transmembraneous glycoprotein (59 kDa) which belongs to the immunoglobulin superfamily. CD4 is present on a subset of T lymphocytes ("helper/inducer" T cells) and is also expressed at a lower level on monocytes, tissue macrophages and granulocytes. The antigen is involved in binding to MHC class II molecules. The intracellular domain of the antigen is associated with p56lck protein tyrosine kinase.
Uniprot ID:	Q6Q4G0
NCBI:	9031
Host / Isotype:	Mouse / IgG1
Clone:	CT-4
Immunogen:	Chicken thymocytes and Ig-negative blood leukocytes.
Format:	State: Liquid purified Ig fraction. Buffer System: PBS containing 0.09% Sodium Azide as preservative and a stabilizing agent. Label: PE – R-Phycoerythrin
Applications:	Flow Cytometry: $\leq 0.2 \mu\text{g}/10^6$ cells. (Ref.1) Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Specificity:	Specific to CD4 (Mr. 64 kda). This antibody also reacts with Turkey and Quail as demonstrated by flow cytometry. This antibody inhibits both PHA- and Con A-induced proliferative responses of splenocytes, and PWM-induced IL-2 production. Species: Chicken and Turkey. Other species not tested.
Storage:	Store the antibody undiluted at 2-8°C. DO NOT FREEZE! This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.
General Readings:	1. Chan, M.L., C.-L. Chen, L. Ager, and M.D. Cooper. 1988. J. Immunol. 140:2133. 2. Cooper, M.D., R.P. Bucy, and C.-L. Chen. 1990. In: The Avian Model in Developmental Biology: From Organism to Genes. Editions du CNRS, pp. 239-249. 2. Tanimura N, Sharma JM. Appearance of T cells in the bursa of Fabricius and cecal tonsils during the acute phase of infectious bursal disease virus infection in chickens. Avian Dis. 1997;41:638-45. 3. Pantin-Jackwood MJ, Brown TP, Huff GR. Proventriculitis in broiler chickens:

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 14. Xue M, Shi X, Zhao Y, Cui H, Hu S, Cui X, et al. Effects of reticuloendotheliosis virus infection on cytokine production in SPF chickens. *PLoS One.* 2013;8(12):e83918.
 15. Peng X, Zhang K, Bai S, Ding X, Zeng Q, Yang J, et al. Histological lesions, cell cycle arrest, apoptosis and T cell subsets changes of spleen in chicken fed aflatoxin-contaminated corn. *Int J Environ Res Public Health.* 2014;11:8567-80.
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Pictures:

Immunofluorescent Staining: Chicken peripheral blood mononuclear cells were double stained with Mouse anti-Chicken CD4-PE and Mouse anti-Chicken CD3-FITC (AM08114FC-N). Small lymphocytes were then gated and analyzed on a FACScan(TM) flow cytometer (BDIS, San Jose, CA). Amount Used: 0.1 µg/10e6 cells.

