

Description

CD4 is a 55 kDa membrane glycoprotein of the immunoglobulin family found on T helper cells. It binds the constant region of MHC class II molecules on antigen presenting cells during T cell activation.

Technical Information

Antibody: Mouse monoclonal, IgG₁
 Specificity: Bovine CD4¹
 Cross-reactivity: Not tested
 Immunogen: Bovine lymphocytes

Formulation and Storage

Purity: IgG purified by protein G affinity chromatography from serum-free cell culture supernatant.

Product Formulation: Lyophilized from a ≥ 1 mg/ml solution in 20 mM NaH₂PO₄ 0.15 M NaCl, 1.0% (w/v) mannitol, pH 7.4. Concentration determined by absorbance at 280 nm using an extinction coefficient of 1.4 ($\epsilon_{0.1\%}$).

Reconstitution: Reconstitute with deionized water.

Storage: Aliquot and store at -20°C for prolonged periods. Avoid freeze-thaw cycles. Alternatively add 0.02% (w/v) sodium azide and store at 4°C.

Country of Origin: Hybridoma country of origin- Kenya.
 Subcloned and produced- USA.

Available Formats: 0.1 mg and 0.5 mg

References

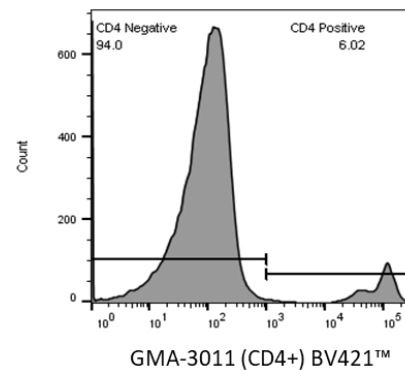
¹ Baldwin, C.L., Teale, A.J., Naessens, J.G., Goddeeris, B.M., MacHugh, N.D., and Morrison, W. I. 1986. *J. Immunol.* 136 (12):4385-4391.

Applications

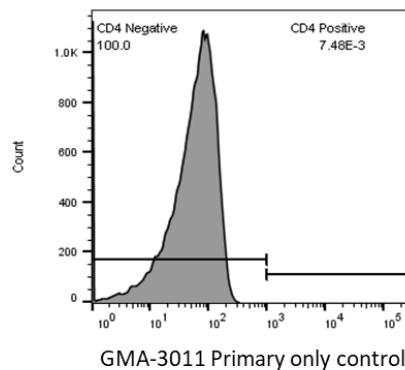
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Flow Cytometry: Recommended concentration is 1.0 to 10 μ g/mL per 1×10^6 PBMCs in 100 μ l. Investigator should titrate for specific application.

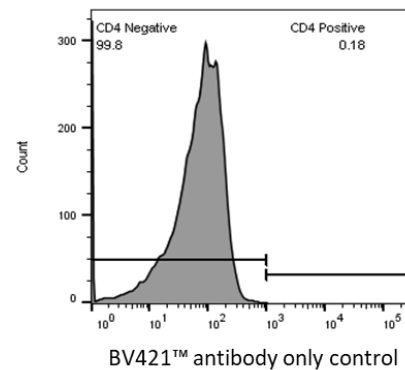
Flow Cytometry Data



Peripheral blood was collected from a purebred Holstein cow into sodium heparin vacutainers and peripheral blood mononuclear cells (PBMCs) were isolated using Histopaque-1083.



Cells were washed in phosphate-buffered saline and 1×10^6 cells were stained with 4.0 μ g/mL GMA-3011 and visualized with a secondary rat anti-mouse IgG₁ antibody conjugated to BV421™.



PBMCs were also stained with GMA-3011 or the BV421™-conjugated antibody only as negative controls. Cells were scanned and data collected using a Milltenyi VYB flow cytometer.

Data was analyzed with FlowJo® version 10.2 analysis software.