

Description

MHC Class II is a molecule found on antigen- presenting cells which recognizes peptides derived from pathogens internalized by the cells or in cellular vesicles. The molecules present the peptides to CD4+ T lymphocytes to initiate an adaptive immune response.

Technical Information

Antibody:	Mouse monoclonal, IgG _{2a}
Specificity:	Bovine MHC Class II ¹ , monomorphic
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 NaH ₂ PO ₄ 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

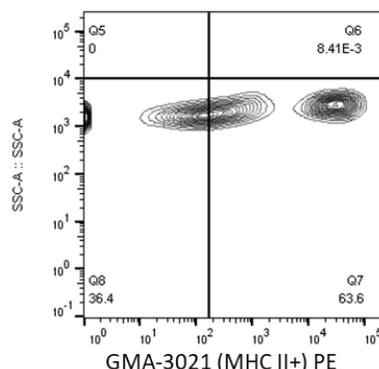
¹ Emery, D.L., MacHugh, N.D., Ellis, J.A. 1987. *Immunology*. 62:177-183.

Applications

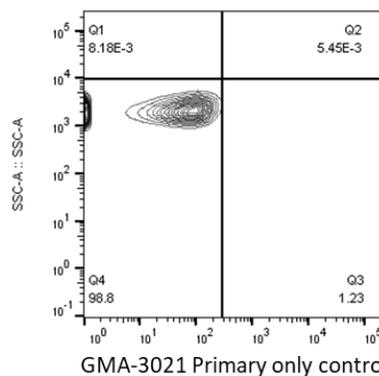
For research use only.

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.

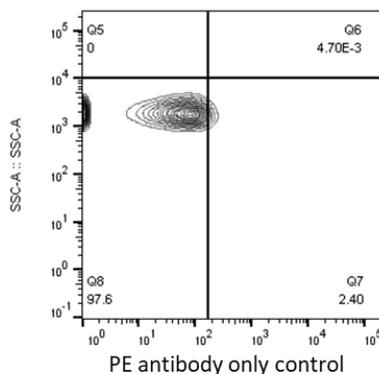
Flow Cytometry Data



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 6.25 μ g/mL GMA-3021 and visualized with a secondary goat anti-mouse IgG_{2a} antibody conjugated to phycoerythrin (PE).



PBMCs were also stained with GMA-3021 or the PE-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.