

Monoclonal Antibody to WC1-N1 Pan Leukocytes

Catalog No.: VB7A1-01 VB7A1-05

Quantity: 0.1 mg 0.5 mg

Concentration: 1.0 mg/ml

Background: WC1 is expressed exclusively on CD4-/CD8- gamma delta T lymphocytes with >90% of circulating gamma delta T cells in cattle, goats, sheep, pig, deer, elk, llamas, and camels. WC1+ cells are found in the thymus, lymph nodes, spleen, in the dermis of the skin and the lamina propria of the gastrointestinal tract. Multiple WC1 genes are estimated to be in the order of 10 genes within a region of ~1 Mb in cattle which encodes the heterogeneous WC1 isoforms with overlapping epitopes and patterns of expression. Using mAbs specific for each of 3 expressed WC antigens, WC1.1, WC1.2 and WC1.3, it was found that some of the WC1.1 and WC1.2 encoded antigens are expressed on non-overlapping subsets of peripheral blood gamma delta T cells, whereas the WC1.3+ subset is contained within the WC1.1+ subset. B7A1 recognizes an epitope termed N1 that is expressed on the majority of WC1 isoforms. Two color analysis with BAQ4A, that recognizes epitope N2, has shown there are small N2+ N1- and N2- N1+ populations of WC1+ cells. Two color analysis with anti-WC1 mAbs that recognize epitopes expressed on isoforms may be partially or completely included in the WC1+ populations of cells expressing N1 and N2. The mutually exclusive populations that express the N3 or N4 epitopes are included in the populations expressing N1 and N2.

Host / Isotype: Mouse IgM

Clone: B7A1

Format: **State:** Liquid ascites.
Purification: Clarified by centrifugation, and filtered through a 0.2 µM filter.
Buffer System: Supplied in phosphate buffered saline, preserved with sodium azide.

Applications: Suitable for Flow cytometry, immunohistochemistry, cell function.
Other applications not tested. Optimal dilutions of this antibody are dependent on conditions and should be determined by the user.

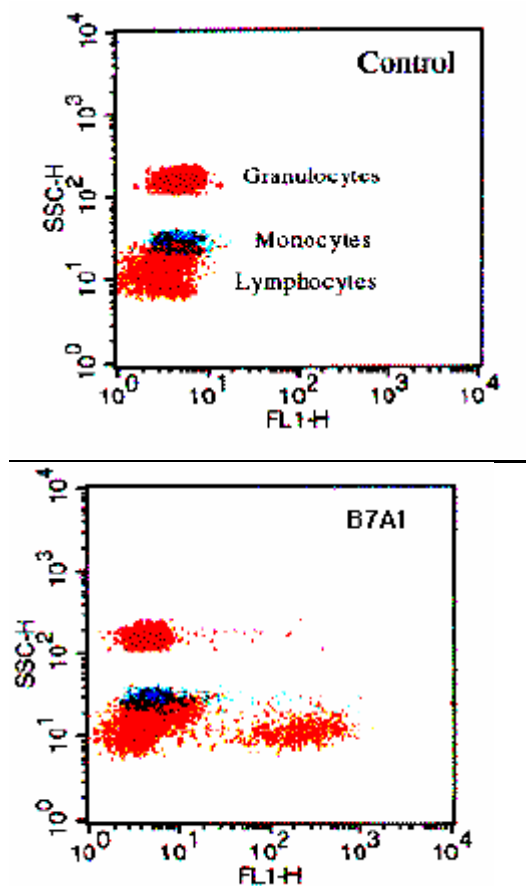
Specificity: This antibody detects WC1-N1 Pan Leukocytes.
Labels 14 % PBMC.
Species: Cattle, goat, sheep, water buffalo, Cape buffalo, big horn sheep, white tail deer, mule deer, black tail deer, elk, bison. Does not react with swine, horse, cat, dog, ferret, mink, human, llama or camel.

Storage: Store the antibody at 2 – 8 °C.
Should this product contain a precipitate we recommend microcentrifugation before use. Shelf life: one year from despatch.

References:

Howard, C.J., and J. Naessens. Summary of workshop findings for cattle (Tables 1 and 2). *Vet. Immunol. Immunopathol.* 39(1-3):25-48 (Nov. 1993).
MacHugh, N.D., et al. Clustering of monoclonal antibodies recognizing different members of the WC1 gene family. *Vet. Immunol. Immunopathol.* 39(1-3):155-160 (Nov. 1993).
Pighetti, G.M., and L.M. Sordillo. Specific immune responses of dairy cattle after primary inoculation with recombinant bovine interferon-gamma as an adjuvant when vaccinating against mastitis. *Am. J. Vet. Res.* 57(6):819-824 (June 1996).

Picture(s):



Profile obtained with bovine leukocytes.

VB7A1-01_-05/AV0207

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Material Safety Datasheets are available at www.acris-antibodies.com or on request.

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