

## Monoclonal Antibody to Bu-1 (Bu1a + Bu1b) - FITC

**Alternate names:** B-Cell Marker

**Catalog No.:** AM08139FC-N

**Quantity:** 0.5 mg

**Concentration:** 0.5 mg/ml

**Background:** The Bu1 [chB6] molecule is expressed on chicken B cells throughout most of their development, as well as on some non lymphoid cells. It has long been used as an allotypic marker in important studies of B cell development, though its function is unknown. It has no recognizable similarity to known mammalian molecules and thus represents a unique B cell marker. Its presence in chickens may be related to differences in the properties of B cell development between chickens and mammalian species. The sequences of the different alleles of this gene revealed a higher level of polymorphism than expected. A restriction fragment length polymorphism linked to the CHB6 gene has been used to determine its location on the linkage map of the chicken genome, which will allow the definitive evaluation of reported associations with disease resistance.

**Uniprot ID:** [Q90746](#)

**NCBI:** [NP\\_990513.1](#)

**GeneID:** [396098](#)

**Host / Isotype:** Mouse / IgG1

**Clone:** AV20

**Immunogen:** Bursal cells from one-day-old H.B15 (Bu-1a/b) strain chickens. (Ref.1)

**Format:** **State:** Liquid purified Ig fraction.

**Buffer System:** PBS containing 0.09% Sodium Azide as preservative.

**Label:** FITC – Fluorescein Isothiocyanate Isomer 1

**Applications:** **Flow Cytometry:** < / = 1 µg/10e6 cells. (Ref.2)

Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This antibody recognizes a monomorphic determinant on the Bu-1 B cell associated alloantigens of both RPL 6(3) (Bu-1a) and 7(2) (Bu-1b) lines of inbred chickens. It also identifies B cells in partially inbred birds. Bu-1 is found on 85-90% of bursal cells, 2-8% of thymocytes, 15-27% of spleen cells, and 2-18% of peripheral blood cells. It is also expressed on subsets of macrophages and monocytes, but not on granulocytes, erythrocytes or thrombocytes. (Ref.1-2) No Cross reactivity is observed with Turkey cells when analyzed by Immunofluorescent staining and Flow Cytometry.

**Species:** Chicken.

Other species not tested.

**For research and in vitro use only. Not for diagnostic or therapeutic work.**

Material Safety Datasheets are available at [www.acris-antibodies.com](http://www.acris-antibodies.com) or on request.

Antibody Hotline - Technical Questions - Antibody Location Service  
Free Call: 0800-2274746 (Germany only) - [www.acris-antibodies.com](http://www.acris-antibodies.com)

**Storage:** Store the antibody undiluted at 2-8°C for one month or in (aliquots) at -20°C for longer. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing. Shelf life: one year from despatch.

**General Readings:** 1. Tregaskes, C.A., N. Bumstead, T.F. Davison, and J.R. Young. 1996. Immunogenetics 44(3):212-217.  
2. Rothwell, C.J., K. Vervelde, and T.F. Davison. 1996. Vet. Immunol. Immunopathol. 55(1-3):225-234.

**Pictures:** **Immunofluorescent Staining:** Chicken peripheral blood mononuclear cells were double stained with Mouse anti-Chicken CD3-PE (Cat#AM08114RP-N) and Mouse anti-Chicken Bu-1-FITC. Lymphocytes were gated and analyzed on a FACScan(TM) flow cytometer (BDB, San Jose, CA). Amount Used: 1 µg/10e6 cells.

