## PERFORMANCE DATA SHEET

1807

## Monoclonal anti-human IgA/FITC\*



*mAb name/Clone:* Hisa43 *Isotype:* Mouse IgG1κ

Immunogen: Human salivary proteins

CATALOG#: 137-040

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2ml

WORKING DILUTION: 1:50 (or use 1.6 μl concentrated stock per 5 x 10<sup>5</sup>-cell test)

**INFORMATION:** Human immunoglobulins are glycoproteins composed of two disulfide-bonded heavy (H) chain subunits, each of which is linked by interchain disulfide bonds to a light (L) chain forming a tetramolecular complex. There are five classes of immunoglobulins, designated IgG, IgA, IgM, IgD and IgE, which are defined by differences in the constant region of H chains. L chains are divided into kappa or lambda classifications based on structural antigenic differences. All classes of immunoglobulins have been found on the cell surface of B lymphocytes where they function as antigen receptors to elicit antigen-dependent proliferation and secretion of antigen specific soluble circulating antibodies. Antibody Hisa43 recognizes cell surface expressed IgA. **References: 1.** Basic and Clinical Immunology, Seventh edition (D. P. Sites & A. I. Terr, eds.) Appleton & Lange., Norwalk, CT (1991). **2.** J. Biewenga, et al, (1986) Mol Immunol 23: 761-767.

**STORAGE CONDITIONS:** *Store at 2 - 5<sup>o</sup>C*. Freeze/Thawing is not recommended. Protect from light.

**PRODUCT STABILITY:** Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date:\_\_\_\_\_

**BUFFER:** 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN<sub>3</sub> (as a preservative).

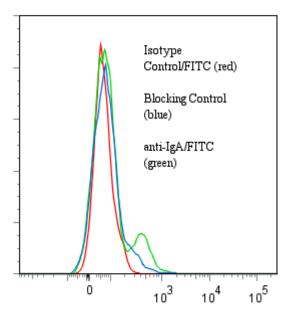
**PRODUCTION:** Protein A purified antibody from tissue culture supernatant was reacted with FITC. Unconjugated FITC was separated from antibody/FITC conjugate by desalting column. The antibody/FITC

conjugate is at **0.5 mg/ml** with a Fluorescein/IgG molar ratio of 11.7.

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**PERFORMANCE:** Five x  $10^5$  ficoll prepared **human peripheral white blood cells** were washed and preincubated 5 minutes with 20 μl of 250 μg/ml human Ig after which they were incubated 45 minutes on ice with 80 μl of anti-IgA/FITC at a **1:50** dilution ( $10\mu g/ml$ ). Cells were washed three times, fixed and analyzed by FACS. A net **12%** sub population of the cells stained positive with a mean shift of **1.0** log<sub>10</sub> fluorescent units when compared to a Mouse IgG1/FITC negative control (Catalog # 278-040) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 μl of 0.5 mg/ml anti-IgA antibody (Catalog #137-020).

Binding of anti-IgA/FITC to human PBMC



<sup>\*</sup> Research Use Only. Not for use in Diagnostic procedures