

## PERFORMANCE DATA SHEET

1807

### Monoclonal anti-human IgA/FITC\*

**mAb name/Clone:** Hisa43

**Isotype:** Mouse IgG1 $\kappa$

**Immunogen:** Human salivary proteins

**CATALOG#:** 137-040

**QUANTITY:** 120 tests

**VOLUME IN VIAL:** 0.2ml

**WORKING DILUTION:** 1:50 (or use 1.6  $\mu$ l concentrated stock per  $5 \times 10^5$ -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°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% Na<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.

**PERFORMANCE:** Five  $\times 10^5$  ficoll prepared human peripheral white blood cells were washed and preincubated 5 minutes with 20  $\mu$ l of 250  $\mu$ g/ml human Ig after which they were incubated 45 minutes on ice with 80  $\mu$ l 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  $\mu$ l of 0.5 mg/ml anti-IgA antibody (Catalog #137-020).

\* *Research Use Only. Not for use in Diagnostic procedures*

**Binding of anti-IgA/FITC to human PBMC**

