



## PERFORMANCE DATA SHEET

1750

# Monoclonal anti-human IgA\*

**mAb name/Clone:** Hisa43

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

**Immunogen:** Human salivary proteins

**CATALOG#:** 137-020

**QUANTITY:** 100  $\mu$ g

**CONCENTRATION:** 1.0 mg/ml

**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.

**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, 0.5 mg/ml Gentamicin Sulfate (as a preservative).

**PRODUCTION:** Antibody was Protein A purified from (low FBS containing) tissue culture supernatant. Purity was >95% Immunoglobulin by SDS-PAGE with less than 1% Bovine Immunoglobulin.

**PERFORMANCE:** Five x 10<sup>5</sup> ficoll prepared **human peripheral blood mononuclear cells** were pre incubated 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-human IgA antibody at **10  $\mu$ g/ml**. Cells were washed twice and incubated with 2<sup>o</sup> reagent Goat anti-Mouse IgG/FITC (Catalog #232-011), after which they were washed three times, fixed and analyzed by FACS. A net **3%** sub population of the cells stained positive with a mean shift of **1.23 log<sub>10</sub>** fluorescent units when compared to a Mouse IgG1 negative control (Catalog #278-010) at a similar concentration.

*\*This Product is intended for Laboratory Research use only.*

Binding of anti-human IgA to human cell types

