

PERFORMANCE DATA SHEET

1750

Monoclonal anti-human IgA /Biotin*

mAb name/Clone: Hisa43

Isotype: Mouse IgG1κ

Immunogen: Human salivary proteins

CATALOG#: 137-030

QUANTITY: 100 µg

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 not recommended.

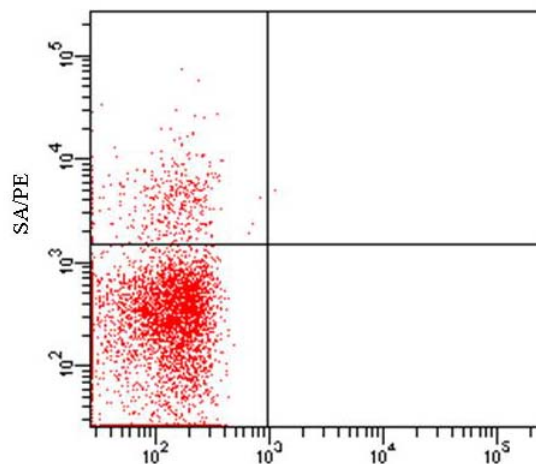
PRODUCT STABILITY: Product should retain activity for at least 12 months after shipping date when stored as recommended. Ship Date: _____

BUFFER: 50 mM Sodium Phosphate pH 7.5, 100 mM Potassium Chloride, 150mM NaCl, 5% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Antibody from (low FBS containing) tissue culture supernatant was Protein A purified to >95% mouse immunoglobulin by SDS-PAGE (<1% bovine immunoglobulin), and reacted with NHS-Biotin. Unconjugated Biotin was removed from conjugate using a desalting column.

PERFORMANCE: Five x 10⁵ ficoll prepared **human peripheral white blood cells** were pre incubated 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-human IgA/Biotin at **10 µg/ml**. Cells were washed twice and incubated with 2^o reagent Streptavidin/R-PE (Catalog #253-050) after which they were washed three times, fixed and analyzed by FACS. A net **8.6%** sub population of the cells stained positive with a mean shift of **1.22 log₁₀** fluorescent units when compared to a Mouse IgG1/Biotin negative control (Catalog # 278-030) 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/Biotin to human PBL



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