



PERFORMANCE DATA SHEET

1750

Monoclonal anti-human IgA/R-PE*

mAb name/Clone: Hisa43

Isotype: Mouse IgG1 κ

Immunogen: Human salivary proteins

CATALOG#: 137-050

QUANTITY: 120 tests

VOLUME IN VIAL: 0.2 ml

WORKING DILUTION: 1:50 (or use 1.6 μ l concentrated stock per 5 x 10⁵-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. Do not freeze! 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, 500 mM Potassium Chloride, 150mM NaCl, 15% Glycerol, 0.2% BSA, 0.04% NaN₃ (as a preservative).

PRODUCTION: Protein A purified antibody from tissue culture supernatant was conjugated to R-Phycoerythrin through a sulfo-ester linkage. Unconjugated antibody was removed using size exclusion chromatography. Antibody conjugate is at 0.5 mg/ml with an A₅₆₅/A₂₈₀ ratio of 3.1.

PERFORMANCE: Five x 10⁵ ficoll prepared human peripheral white blood cells were washed and preincubated 5 minutes with 20 μ l of 250 μ g/ml human Ig after which they were incubated 45 minutes on ice with 80 μ l of product at a dilution factor of 1:50. Cells were washed three times, fixed and analyzed by FACS. A net 14% sub population of the cells stained positive with a mean shift of 1.52 log₁₀ fluorescent units when compared to a Mouse IgG1/R-PE negative control (Catalog # 278-050) at a similar concentration. Binding was blocked when cells were pre incubated 10 minutes with 20 μ l of 0.5 mg/ml anti-IgA antibody (Catalog #137-020).

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

R-Phycoerythrin (R-PE) is covered under patents: U.S. 4,520,110; European 76,695 and Canadian 1,179,942.

Binding of anti-IgA/R-PE to human cell types
#810003 (11-147)

