

## PERFORMANCE DATA SHEET

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# Monoclonal anti-human Kappa Light chain/Biotin\*

**mAb name/Clone:** L1C1

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

**Immunogen:** Human B lymphoma cells

**CATALOG#:** 136-030

**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 L1C1 recognizes cell surface kappa on B cells.

**References:** 1. Basic and Clinical Immunology, Seventh edition (D. P. Sites & A. I. Terr, eds.) Appleton & Lange., Norwalk, CT (1991).

**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% NaN<sub>3</sub> (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 10<sup>5</sup> ficoll prepared **human peripheral white blood 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-Kappa/Biotin at 10  $\mu$ g/ml. Cells were washed twice and incubated with 2<sup>o</sup> reagent Streptavidin/R-PE (Catalog #253-050) after which they were washed three times, fixed and analyzed by FACS. Cells stained positive with a mean shift of 2.17 log<sub>10</sub> 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  $\mu$ l of 0.5 mg/ml anti-Kappa antibody (Catalog #136-020).

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

**Binding of anti-Kappa/Biotin +SA/PE to human PBMC**

