NAME: Monoclonal Mouse Anti-Human Kappa Light Chains

IMMUNOGEN: Monoclonal IgM paraprotein

CLONE/REF: R10-21-F3

CLASS/SUBCLASS: IgG<sub>2a</sub>, kappa.

CODE NO.: N1568

Ready-to-Use DAKO® N-SERIES Primary Antibody and Negative Control Reagent

For use with DAKO EnVision™, DAKO EnVision™ Doublestain and DAKO LSAB<sup>®</sup>2 Systems

For In Vitro Diagnostic Use.

PRESENTATION:
PRIMARY ANTIBODY: 7 mL supernatant mouse monoclonal antibody to human kappa light chains in 0.05 M Tris-HCl buffer, pH 7.6, containing carrier protein and 15 mM sodium azide.

NEGATIVE CONTROL REAGENT: 5 mL fetal calf serum in 0.05 M Tris-HCl buffer, pH 7.6, containing carrier protein and 15 mM sodium azide.

INTENDED USE:
This product has been optimally diluted for use in DAKO LSAB<sup>®</sup> Kits, DAKO LSAB<sup>®</sup>2, or DAKO EnVision™ Systems. The primary antibody and negative control reagent should be applied as directed in the Staining Procedure section of the instructions included with each kit. The recommended incubation time for this primary antibody is 10 minutes at room temperature.

REACTIVITY:
This monoclonal antibody reacts with kappa light chains bound to IgG, IgM, and IgA. Free kappa light chains are also labeled but lambda light chains are not reactive.

In normal lymphoid tissue, this antibody strongly labels kappa-positive plasma cells, whereas B-lymphocyte staining is weaker. In the follicular mantle zone, B-lymphocytes are labeled in a mosaic pattern. This is particularly evident in frozen sections. Although most reactive B-cells in lymphoid hyperplasia display a B-cell mixture of light chains, neoplastic B-cell proliferations express either kappa or lambda light chains. The antibody shows a granular staining pattern often appearing as a perinuclear ring in the cytoplasm of large cell lymphoma.

In blood smears, surface immunoglobulin on normal and neoplastic B-cells can be demonstrated with this antibody.

Extracellular immunoglobulin within blood vessels and connective tissue tends to yield a diffuse staining pattern. Cells containing absorbed immunoglobulin (e.g. Reed-Sternberg cells, dendritic cells, macrophages or monocytes) may also be labeled by this antibody.

SPECIMENS:
Formalin-fixed, paraffin-embedded tissue sections, cryostat sections, and cell preparations. Use of proteolytic enzymes is recommended for greater staining intensity and uniformity on formalin-fixed tissues.

APPLICATIONS:
This product can be used for the identification of kappa light chains in lymphocytes and the demonstration of the monoclonal nature (light chain restriction) of their neoplastic derivatives.

LIMITATIONS:
This product has been developed for use in DAKO LSAB<sup>®</sup> Kits, DAKO LSAB<sup>®</sup>2 Kits, or DAKO EnVision™ Systems. It may be used as a primary antibody and negative control reagent in other staining systems, however, some procedural alterations may be required to achieve optimal results. This product is not compatible with DAKO LSAB<sup>®</sup>+ Kits.

Immunoglobulin staining of fixed, paraffin-embedded tissues has been documented to yield variable results, depending on specimen type and fixation parameters.

STORAGE:
Store at 2-8°C.

REFERENCES:
10. Warnke RA and Rouse RV. Limitations encountered in the application of tissue section immunodiagnosis to the study of lymphomas and related disorders. Human Pathol 1985; 16:326