



Product Information

**ANTI-HUMAN KAPPA LIGHT CHAIN
(BOUND & FREE)
PEROXIDASE CONJUGATE
Antibody Developed in Goat
Affinity Isolated Antigen Specific Antibody**

Product Number **A 7164**

Product Description

Anti-human Kappa light chain (bound and free) is developed in goat using purified human kappa light chains as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-human kappa antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to kappa light chains (bound and free). Goat anti-human kappa affinity isolated antibody is conjugated to Horseradish Peroxidase, Type VI (Product No. P 8375) by a modification of the periodate method of Wilson and Nakane.¹

Specificity of the peroxidase conjugated anti-human kappa antibodies is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for human kappa light chain (bound and free) when tested against human IgA, IgG, IgM, Bence Jones Kappa and Lambda myeloma proteins.

Identity and purity of the antibody is established by immunoelectrophoresis (IEP), prior to conjugation. Electrophoresis of the antibody preparation followed by diffusion versus anti-goat IgG and anti-goat whole serum results in single arcs of precipitation.

Reagents

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with 0.01% thimerosal as a preservative.

Precautions and Disclaimer

Consult the MSDS for information regarding hazards and safe handling practices.

Storage/Stability

Store at 2-8 °C for up to one month.

For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing is not recommended. Storage in "frost-free" freezers is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

We are now reporting lot specific information as a titer by direct ELISA rather than as a working dilution. Titer is defined as the dilution of conjugate sufficient to give a change in absorbance of 1.0 at 450 nm after 30 minutes of substrate conversion at 25 °C.

Microtiter plates are coated with purified free kappa light chain at a concentration of 200 ng/ml in 0.05 M carbonate-bicarbonate buffer, pH 9.6 (Carbonate/Bicarbonate Buffer capsules are available as Product No. C 3041).

Substrate: o-Phenylenediamine dihydrochloride (OPD, Product No. P 8287), 0.4 mg/ml in 0.05 M phosphate-citrate buffer, pH 5.0 containing 0.03% sodium perborate (Phosphate-Citrate Buffer capsules with sodium perborate are available as Product No. P 4922).

Working dilution should be determined by titration assay. Due to differences in assay systems, this titer may not reflect the user's actual working dilution.

References

1. Wilson, M. B. and P. K. Nakane, Immunofluorescence and Related Staining Techniques (Elsevier North Holland BioMedical Press, p. 215 Amsterdam), (1978).
2. Voller, A., et al., Bull. World Health Organ., **53**, 55 (1976).

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