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Product Information

Anti-Human Lambda Light Chains (Bound and Free)-Alkaline Phosphatase
produced in goat, affinity isolated antibody

Catalog Number **A2904**

Product Description
Antiserum is produced in goat using lambda light chains isolated from Bence Jones urines. Antibody is isolated from goat anti-human lambda antiserum by immunospecific purification to remove essentially all goat serum proteins, including immunoglobulins which do not specifically bind to human lambda light chain (bound or free light chains). The antibody is then conjugated to alkaline phosphatase by protein cross linking with 0.2% glutaraldehyde.[1]

Reagent
Supplied as a solution in 0.05 M Tris buffer, pH 8.0, containing 1% BSA, 1 mM $MgCl_2$, 50% glycerol and 15 mM sodium azide.

Precautions and Disclaimer
This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Specificity
Specificity of the Anti-Human Lambda Light Chains-Alkaline Phosphatase is determined by ELISA. The conjugate is specific for human lambda light chains when tested against bound kappa and lambda proteins (human IgA, IgG, IgM) and free Bence Jones Kappa and Lambda myeloma proteins.

Identity and Purity
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.

Protein Concentration: 2.3 mg conjugate/ml (prior to the addition of BSA).

Enzyme Activity: 4450 units/ml

Determined using 6 mM p-nitrophenylphosphate (pNPP) in 10% diethanolamine buffer, pH 9.8, containing 0.5 mM magnesium chloride at 37°C. One unit will hydrolyze 1.0 μmole of pNPP per minute to p-nitrophenol and inorganic phosphate at pH 9.8, 37°C.

Storage
Store at 2-8 °C. Do Not Freeze.

Product Profile
Titer: 1:2000-1:21000 (Direct ELISA)
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 405nm after 30 minutes of substrate conversion at 25°C.[1]

Microtiter plates are coated with purified free human lambda light chain at a concentration of 200 ng/ml in 0.05M carbonate/bicarbonate buffer, pH 9.6 Carbonate/Bicarbonate Buffer capsules are available as Catalog No. C3041.

Substrate: p-Nitrophenyl Phosphate (pNPP, Catalog No. N2765), 1.0 mg/ml in 10% diethanolamine buffer, pH 9.8, containing 0.5 mM $MgCl_2$.

Working Dilution
Working dilution should be determined by titration assay. We now list a lot specific titer by direct ELISA for this product. Due to differences in assay systems, this titer may not reflect the user's actual working dilution.

Reference
1. Voller, A., et al., Bulletin WHO, **53**, 55 (1976).

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