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Product Information

Anti-Human IgM (μ-chain specific)-Alkaline Phosphatase
produced in goat, affinity isolated antibody

Catalog Number **A3275**

Product Description

Anti-Human IgM (μ-chain specific) is prepared from goat anti-human IgM antiserum by immunospecific purification to remove essentially all goat serum protein, including immunoglobulins, which do not bind specifically to the μ-chain of human IgM. Conjugation of the antibody preparation to alkaline phosphatase is accomplished by protein cross-linking with 0.2% glutaraldehyde.[1]

Specificity of Anti-Human IgM (μ-chain specific)-Alkaline Phosphatase is determined by ELISA. The conjugate is specific for human IgM when tested against human IgA, IgG, IgM, Bence Jones Kappa, and Lambda myeloma proteins.[2]

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

Reagent

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

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.

Storage/Stability

Store at 2-8 °C. Do Not Freeze.

Product Profile

Direct ELISA: titer 1:7,000-1:21,000
We are now reporting lot specific information as a titer 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 405 nm after 30 minutes of substrate conversion at 25 °C.[3]

Microtiter plates are coated with purified human IgM at a concentration of 5 μg/ml in 0.05 M 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 $MgCl_2$.

Note: 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. Avrameas, V., *Immunochemistry*, **6,** 43 (1969).
2. Engvall, E., et al., *Biochim. Biophys. Acta*, **251**, 427 (1971).
3. Voller, A., et al., *Bull. World Health Organ*., **53**, 55 (1976).

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