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Product Information

Anti-Mouse IgA (α -Chain Specific)

Peroxidase Conjugate

Antibody developed in Goat

Affinity Isolated antigen Specific Antiserum

Product Number **A 4789**

Product Description

Anti-Mouse IgA (α -Chain Specific) is developed in goat using purified mouse IgA as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-mouse IgA antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the α -chain of mouse IgA. Goat anti-mouse IgA is conjugated to Sigma 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-Mouse IgA is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for mouse IgA when tested against purified mouse IgA, IgG, and IgM myeloma proteins.

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.

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

For continuous use, 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 (minimum 1:10,000) 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.² Microtiter plates are coated with purified mouse IgA at a concentration of 5 μ g/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 product improvement and changes in the assay procedure, 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.

References

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

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