Product Information

Anti-Human IgA (α-chain specific)–Peroxidase Antibody Produced in Goat

Affinity isolated antibody

A0295

Product Description

Antiserum is developed in goat using purified human IgA as the immunogen. The antibody is isolated from goat anti-human IgA antiserum by immunospecific purification to remove essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the alpha chain of human IgA. Goat antihuman IgA is conjugated to peroxidase by means of a two-step glutaraldehyde method.

Specificity of the antibody conjugate is determined by immunoelectrophoresis (IEP). The conjugate is specific for human IgA when tested against human IgA, IgG, IgM, Bence Jones Kappa and Lambda myeloma proteins.

Cross-reactivity of the antibody conjugate is determined by ELISA. The conjugate shows no reactivity with mouse or rat IgG.

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.

Reagent

Solution in 0.01 M phosphate buffered saline pH 7.4, containing 0.05% MIT as preservative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses.

Storage/Stability

For continuous use, store at 2-8 °C for a maximum of one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

Product Profile

- Antibody concentration: 4-11 mg/mL
- Molar Ratio (IgG:Peroxidase) = 0.6-1.5

Enzyme Activity

Minimum 150 purpurogallin units/mL

Enzyme activity is determined using 5% pyrogallol, P0381, in deionized water, pH 6.0, at 20 °C. One purpurogallin unit will form 1 mg of purpurogallin from pyrogallol in 20 seconds at pH 6.0, 20 °C.

Direct ELISA

Minimum 1:50,000 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.[1]

Microtiter plates are coated with purified human IgA at a concentration of 5 µg/mL in 0.05 M carbonate-bicarbonate buffer, pH 9.6.

Carbonate-Bicarbonate Buffer capsules are available as C3041.

Substrate

o-Phenylenediamine dihydrochloride (OPD), P8287, 0.4 mg/mL in 0.05 M phosphate-citrate buffer, pH 5.0 containing 0.03% sodium perborate.

Phosphate-Citrate Buffer with Sodium Perborate capsules are available as P4922.

Dot Blot

A minimum working dilution of 1:80,000 was determined in a direct chemiluminescence assay using 10 ng human IgA/dot. Luminol plus enhancer was used as substrate.

Immunohistology

A minimum working dilution of 1:100 was determined in a direct assay using formalin-fixed, paraffin-embedded human tonsil sections.

Note: Working dilutions should be determined by titration assay. Due to differences in assay systems, these titers may not reflect the user's actual working dilution.

This goat antiserum was maintained at pH 5.0 for 40 minutes to meet U.S.D.A. requirements.

Reference

1. Voller, A., et al., Bulletin World Health Org. 53, 55 (1976).

Notice

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