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Product Information

Anti-Human IgG (Fc specific)−Peroxidase antibody produced in goat
affinity isolated antibody

Catalog Number **A0170**

Antiserum is produced in goat using the Fc fragment of human IgG as the immunogen. The antibody is isolated from anti-human IgG antiserum by immunospecific purification to remove essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the Fc fragment of human IgG. Anti-Human IgG is conjugated to peroxidase by means of a two-step glutaraldehyde method. The product is purified to remove unconjugated material.

Specificity of the Anti-Human IgG (Fc specific)-Peroxidase is determined by ELISA. The conjugate is specific for human IgG (Fc fragment) when tested against human IgA, IgG (Fab and Fc fragments), 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
Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 0.05% MIT.

Antibody concentration: 4-11 mg/ml

Molar Ratio:0.6-1.5

This goat antisera was maintained at pH 5.0 for 40 minutes to meet USDA requirements.

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

Storage
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, 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
In an agar diffusion assay the conjugate produces a precipitation arc at a dilution of 1:64 versus a 1:640 dilution of normal human serum.

ELISA: a minimum titer of 1:60,000 is determined by direct ELISA. Titer is defined as the diluion 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 IgG 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 Number C3041.

Substrate: *o*-Phenylenediamine dihydrochloride (OPD), Catalog Number 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 Catalog Number P4922.

Dot Blot: a minimum dilution of 1:100,000 is determined in a direct chemiluminescence assay using 20 ng human IgG/dot. Luminol plus enhancer was used as substrate.

Immunohistochemistry: a dilution of 1:200 is obtained 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.

Reference

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

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