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Product Information

**ANTI-RABBIT IGG (WHOLE MOLECULE)
PEROXIDASE CONJUGATE**
Antibody developed in Goat
IgG Fraction of Antiserum

Product Number **A 9169**

Product Description

Antiserum is developed in goat using purified rabbit IgG as the immunogen. Whole antiserum is fractionated and then further purified by ion exchange chromatography to provide the IgG fraction of antiserum. This fraction is essentially free of other goat serum proteins. Goat anti-rabbit IgG is then conjugated to peroxidase by protein cross linking with 0.2% glutaraldehyde.

Specificity of the Peroxidase Conjugated Anti-Rabbit IgG antibodies is determined by immunoelectrophoresis (IEP) versus normal rabbit serum and rabbit IgG.

Identity and purity of the antibody is established by immunoelectrophoresis, prior to conjugation. Electrophoresis of the product followed by diffusion versus the anti-goat IgG and the anti-goat whole serum results in single arcs of precipitation in the gamma region.

Reagents

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 0.01% thimerosal as a preservative.

Product Profile

Enzyme Activity: Reported in purpurogallin units/ml. Enzyme activity is determined using 5% Pyrogallol (Sigma Product No. P 0381) 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.

Titers

1. ELISA
A minimum titer of 1:50,000 is determined by Direct ELISA. Microtiter plates are coated with purified rabbit 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 Product No. C 3041). 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

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).

2. Dot Blot
 - a. A minimum dilution of 1:12,000 is determined in a direct assay using 40 ng rabbit IgG/dot.
 - b. A minimum dilution of 1:12,000 is determined in an indirect assay using 20 ng/dot human IgG and Rabbit Anti-Human IgG (Product No. I 8635) as the primary antibody.
 - c. When tested in an indirect chemiluminescence system using 2.5 ng human IgG/dot and Rabbit Anti-Human IgG (Product No. I 8635) as the primary antibody, this product is determined to have a minimum dilution of 1:80,000 when used as secondary antibody. Luminol plus enhancer was used as substrate.

3. Immunohistology

A minimum dilution of 1:400 is determined by indirect immunoperoxidase labeling of formalin-fixed paraffin-embedded human tonsils and Rabbit Anti-Human IgG (Product No. I 8635) as the first antibody.

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.

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.

References

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

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