



Product Information

Anti-Chicken IgY (IgG) (whole molecule)

Peroxidase Conjugate

Developed in Rabbit

IgG Fraction of Antiserum

Product No. **A 9792**

Product Description

Antiserum is developed in rabbit using purified chicken IgY (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 rabbit serum proteins. Rabbit anti-chicken IgY (IgG) is then conjugated to peroxidase by protein cross linking with 0.2% glutaraldehyde.

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

Identity and purity of the antibody is established by immunoelectrophoresis, prior to conjugation.

Electrophoresis of the product followed by diffusion versus the anti-rabbit IgG and the anti-rabbit whole serum results in single arcs of precipitation in the gamma region.

Reagent

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

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 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

Titers

1. Direct ELISA: Minimum 1:30,000
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 chicken IgY (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).

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 1:6,000 was determined in a direct assay using 40 ng chicken IgG/dot.
 - b. A minimum dilution of 1:10,000 was determined in an indirect assay using 20 ng human IgG/dot and chicken anti-human IgG as the primary antibody.
 - c. In an indirect chemiluminescence system using 5 ng human IgG/dot and chicken anti-human IgG as the primary antibody, this product was determined to have a minimum dilution of 1:160,000 when used as secondary antibody. Luminol plus enhancer was used as substrate.
3. Immunohistology
A minimum dilution of 1:500 was determined in an indirect assay using formalin-fixed, paraffin-embedded human pancreas sections and chicken anti-human insulin as the primary antibody.

Molar Ratio (IgG: Peroxidase) = 0.8 to 1.5

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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