

## Product Information

### ANTI-MOUSE IgG (WHOLE MOLECULE) PEROXIDASE CONJUGATE IgG Fraction of Antiserum

Product No. **A 9044**

#### Product Description

Anti-mouse IgG (whole molecule) is developed in rabbit using purified mouse 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-mouse IgG is then conjugated to peroxidase by protein cross-linking with 0.2 % glutaraldehyde

Specificity of Peroxidase Conjugated Anti-Mouse IgG is determined by immunoelectrophoresis (IEP) versus normal mouse serum and mouse 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.

#### 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.

#### 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

Enzyme Activity: Reported in purpurogallin units/ml. Enzyme activity is determined using 5 % pyrogallol (Product No. P 0381) in deionized water, pH 6.0, at 20 °C. One purpurogallin unit will form 1 mg of purpurogallin from pyrogallol at in 20 seconds at pH 6.0, 20 °C.

#### Titers

##### 1. ELISA

A minimum titer of 1:40,000 is determined by direct ELISA. 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 (Voller, et al.<sup>1</sup>). Microtiter plates are coated with purified mouse 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 0.0 3% sodium perborate (Phosphate-Citrate Buffer Capsules with Sodium Perborate are available as Product No. P 4922).

##### 2. Dot Blot

- A minimum dilution of 1:6,000 is determined in a direct assay using 40 ng mouse IgG/dot.
- A minimum dilution of 1:8,000 is determined in an indirect assay using 20 ng human IgG/dot and Mouse Monoclonal Anti-Human IgG (Product No. I 5885) as the primary antibody.
- In an indirect chemiluminescence system using 10 ng human IgG/dot and Mouse Monoclonal Anti-Human IgG (Product No. I 5885) as the primary antibody, this product was determined to have a minimum dilution of 1:80,000 when used as secondary antibody. Luminal plus enhancer was used as substrate.

3. Immunohistology

A minimum dilution of 1:200 is determined by an indirect assay using formalin-fixed, paraffin-embedded human tonsil or human appendix and Mouse Monoclonal Anti-Human IgG (Product No. I 5885) as the primary antibody.

Molar Ratio (IgG:Peroxidase): 0.8 to 1.5.

**Reference**

1. Voller, A., et al., Bull. World Health Organ., **53**, 55 (1976).

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.

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