

## Product Information

### Anti-Mouse IgG (whole molecule)- Peroxidase Produced in Goat, IgG Fraction of Antiserum

Product Number **A 5278**

#### Product Description

Anti-Mouse IgG is developed in goat 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 goat serum proteins. Goat anti-mouse IgG is conjugated to to Sigma Horseradish Peroxidase, Type VI (Product No. P 8375) by a modification of the periodate method of Wilson and Nakane.<sup>1</sup>

Specificity of the goat anti-mouse IgG antibody is determined by Ouchterlony Double Diffusion (ODD) prior to conjugation. The antibody preparation reacts with mouse IgA, IgG1, IgG2a, IgG2b, IgG3, and IgM, myeloma proteins.

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

#### Reagent

The product is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with 0.01% thimerosal as a preservative.

#### Precautions and Disclaimer

This product is for research use only. Consult the MSDS for information regarding hazards and safe handling practices.

#### Storage/Stability

Store at  $-20^{\circ}\text{C}$ . The antibody may be stored at  $2-8^{\circ}\text{C}$  for up to one month. For extended storage, the solution should 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

We are now reporting lot specific information as a titer by direct ELISA (minimum 1:10,000) 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  $25^{\circ}\text{C}$ . Microwell plates are coated with purified mouse IgG at a concentration of  $5\ \mu\text{g}/\text{mL}$  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).

Working dilution should be determined by titration assay. Due to product improvement and changes in the assay procedure, we now list a lot specific titer by direct ELISA for this product. Due to differences in assay systems, this titer may not reflect the user's actual working dilution.

**References**

1. Wilson, M. and Nakane, P., *Immunofluorescence and Related Staining Techniques* (Elsevier/North Holland BioMedical Press, Amsterdam), p. 215 (1978).
2. Voller, A., et al., Bull. World Health Organ., **53**, 55 (1976).

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