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# **Product Information**

SIGMA-ALDRICH®

Anti-Mouse IgG (Whole Molecule) Peroxidase Conjugate

Affinity Isolated Antigen Specific Antibody Antibody developed in Goat

Product Number A 4416

# **Product Description**

Anti-Mouse IgG (Whole Molecule) is developed in goat using purified mouse IgG as the immunogen. Affinity isolated antigen specific antibody is obtained from goat anti-mouse IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, that do not specifically bind to mouse IgG. Goat anti-mouse IgG is conjugated to Sigma Horseradish Peroxidase, Type VI (Product No. P 8375) by a modification of the periodate method of Wilson and Nakane.<sup>1</sup>

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

#### Reagents

The conjugate is provided as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 1% BSA with 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**

A minimum titer of 1:10,000 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.² 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 containg 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

- 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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