



## Product Information

**ANTI-RAT IgG (WHOLE MOLECULE)  
PEROXIDASE CONJUGATE**  
Antibody Developed in Goat  
Affinity Isolated Antigen Specific Antibody

Product No. **A 9037**

### Product Description

Antiserum is developed in goat using purified rat IgG as the immunogen. Antibody is isolated from goat anti-rat IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins that do not specifically bind to rat IgG. Goat anti-rat IgG is conjugated to Horseradish Peroxidase, Type VI (Product No. P 8375) by a modification of the periodate method of Wilson and Nakane.<sup>1</sup> The conjugate 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.

### Identity and Purity

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

### Titer: Minimum 1:10,000 (Direct ELISA)

We are now reporting lot specific information as a titer by direct ELISA 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 450nm after 30 minutes of substrate conversion at 25 °C.<sup>2</sup> Microtiter plates are coated with purified rat 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).

### Working Dilution

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.

### 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. Wilson, M.B., and P.K. Nakane, in *Immunofluorescence and Related Staining Techniques* (Elsiever/North Holland BioMedical Press, Amsterdam), p. 215 (1978).
2. Voller, A., et al., *Bulletin WHO*, **53**, 55 (1976).

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