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## Product Information

**ANTI-BOVINE IgG (WHOLE MOLECULE)  
PEROXIDASE CONJUGATE**  
Antibody developed in Rabbit  
Affinity Isolated Antigen Specific Antibody

Product No. **A 7414**

### Product Description

Antiserum is developed in rabbit using purified bovine IgG as the immunogen. Antibody is isolated from rabbit anti-bovine IgG antiserum by immunospecific purification which removes essentially all rabbit serum proteins, including immunoglobulins that do not specifically bind to bovine IgG. Rabbit anti-bovine 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>

Antiserum is determined to be immunospecific for bovine IgG by immunoelectrophoresis (IEP), versus bovine serum and bovine IgG, prior to conjugation.

Identity and purity of the antibody is established by immunoelectrophoresis, prior to conjugation. Electrophoresis of the antibody preparation followed by diffusion versus anti-rabbit IgG and anti-rabbit 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 0.01% thimerosal as a preservative.

### Product Profile

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 bovine 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 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

For continuous use, store at 2-8 °C for a maximum of 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., and Nakane, P., 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).

Pcs9/00