

Product Information

ANTI-DOG IgG (WHOLE MOLECULE) PEROXIDASE CONJUGATE ANTIBODY DEVELOPED IN RABBIT IgG FRACTION OF ANTISERUM

Product No. **A9042**

Product Description

Antiserum is developed in rabbit using purified dog 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-dog IgG is then conjugated to peroxidase by protein cross linking with 0.2% glutaraldehyde.

Specificity of the Peroxidase Conjugated Anti-Dog IgG antibodies is determined by immunoelectrophoresis (IEP) versus normal dog serum and dog IgG, prior to conjugation.

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.

Product Profile

Molar Ratio (IgG:Peroxidase) = 0.8-1.5

Titers

1. Minimum 1:25,000 (Direct ELISA)
We are now reporting lot specific information as a titer by direct ELISA rather than as a working dilution (see below). 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.¹). Microtiter plates are coated with purified dog 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. C3041).

Substrate: *o*-Phenylenediamine Dihydrochloride (OPD, Product No. P8287), 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. P4922).

2. Dot Blot

- a. A minimum dilution of 1:3,000 was determined in a direct assay using 40 ng dog IgG/dot.
- b. A minimum dilution of 1:40,000 was determined in a direct chemiluminescence assay using 10 ng dog IgG/dot. Luminol plus enhancer was used as substrate.

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.

Storage

For continuous use, store at 2-8 °C. 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.

Reference

1. Voller, A., et al., Bulletin WHO, **53**, 55 (1976).

Pcs9/01