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ProductInformation

ANTI-HUMAN IgG (Fab specific)
ALKALINE PHOSPHATASE CONJUGATE
Antibody developed in Goat
Affinity Isolated Antigen Specific Antibody

Product No **A 8542**

Product Description

Antiserum is developed in goat using purified human IgG Fab fragment as the immunogen. Antibody is isolated from goat anti-human IgG antiserum by immunospecific purification which removes essentially all goat serum proteins, including immunoglobulins, which do not specifically bind to the Fab fragment of human IgG. Goat anti-human IgG is conjugated to Alkaline Phosphatase by protein cross linking with 0.2% glutaraldehyde.

Specificity of the Alkaline Phosphatase Conjugated Anti-Human IgG is determined by Enzyme Linked Immunosorbent Assay (ELISA). The conjugate is specific for human IgG and human IgG Fab fragment. Cross reactivity of the antibody-conjugate is also determined by ELISA. The conjugate shows no reactivity with human IgG Fc fragment, mouse IgG or rat IgG.

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 result in single arcs of precipitation.

Reagents

The conjugate is provided as a solution in 0.05 M Tris buffer, pH 8.0, containing 1% BSA, 1 mM $MgCl_2$, with 15 mM sodium azide as a preservative.

Precautions

Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.

Product Profile

Titers

1. Direct ELISA: Minimum 1:40,000

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 405 nm after 30 minutes of substrate conversion at 25 °C (Voller, et al.[1]). Microtiter plates are coated with purified human 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: p-Nitrophenyl Phosphate (pNPP, Product No. N2765), 1.0 mg/ml in 10% diethanolamine buffer, pH 9.8, containing 0.01% $MgCl_2$ and 0.2% sodium azide.

2. Dot Blot

a. A minimum working dilution of 1:30,000 was determined in a direct assay using 20 ng human IgG/dot.
b. A minimum working dilution of 1:30,000 was determined in a direct chemiluminescence assay using 20 ng human IgG/dot. 1,2-Dioxetane and enhancer was used as substrate.

3. Immunohistology

A minimum working dilution of 1:50 was determined by direct immunohistology using formalin-fixed, paraffin-embedded human tonsil sections.

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

Store at 2-8 °C. **Do Not Freeze**.

Reference

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

This goat antiserum was maintained at pH 5.0 for 40 minutes to meet USDA requirements.

Pcs8/00