3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

ProductInformation

Anti-Chicken IgY (IgG) (whole molecule)
Alkaline Phosphatase Conjugate
Developed in Rabbit
IgG Fraction of Antiserum

Product No. **A 1043**

Product Description

Antiserum is developed in rabbit using IgY (IgG) isolated from pooled normal chicken serum as the immunogen. The antibody is isolated from rabbit anti-chicken IgY (IgG) antiserum by immunospecific purification to remove essentially all rabbit serum proteins, including immunoglobulins, which do not specifically bind to chicken IgY (IgG). Rabbit anti-chicken IgY (IgG) is conjugated to Sigma Alkaline Phosphatase using 0.2% glutaraldehyde.

Specificity of the anti-chicken IgY (IgG) antibodies for chicken IgY (IgG) is determined by immunoelectrophoresis (IEP) prior to conjugation using normal chicken serum and chicken IgY (IgG).

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 result in single arcs of precipitation in the gamma region.

Reagent

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

Storage

Store at 2-8 °C. **Do Not Freeze**.

Product Profile

1. Minimum 1;15,000 (Direct ELISA)

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.[1] Microtiter plates are coated with purified chicken IgY (IgG) at a concentration of 5 µg/ml in 0.01 M phosphate buffered saline, pH 7.4, containing 0.1% sodium azide. Substrate: *p*-Nitrophenyl phosphate (pNPP, Product No. N 2765), 1.0 mg/ml in 10% diethanolamine buffer, pH 9.8, containing 0.01% $MgCl_2$ and 0.02% NaN_3.

2. Dot Blot
   a. A minimum working dilution of 1:60,000 was determined by direct assay using 40 ng chicken IgG/dot.
   b. A minimum working dilution of 1:80,000 was determined by indirect assay using 20 ng human IgG/ dot and chicken anti-human IgG as the primary antibody.
   c. In an indirect chemiluminescence system using 10 ng human IgG/dot and chicken anti-human IgG as the primary antibody, this product was determined to have a minimum working dilution of 1:80,000 when used as secondary antibody. 1,2-Dioxetane and enhancer was used as substrate.

3. Immunohistology
A minimum working dilution of 1:20 was determined by indirect assay on formalin-fixed, paraffin-embedded human tonsil sections using chicken anti-human IgG as the primary antibody.

Working dilution should be determined by titration assay. Due to differences in assay systems, the titers given may not reflect the user's actual working dilution.

Reference

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

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