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-HUMAN IgG (WHOLE MOLECULE)
ALKALINE PHOSPHATASE CONJUGATE
Antibody developed in Goat
IgG Fraction of Antiserum

Product Number **A 1543**

Product Description

Antiserum is developed in goat using IgG purified from human serum as the immunogen. Whole antiserum is fractionated and then further purified by ion exchange chromatography to proved the IgG fraction of antiserum, which is essentially free of other goat serum proteins. Conjugation of the antibody preparation to Alkaline Phosphatase is accomplished by protein cross-linking with 0.2% glutaraldehyde.

Specificity of the Anti-Human IgG is determined by immunoelectrophoresis (IEP) versus human serum and human 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 against anti-goat IgG and anti-goat whole serum results in single arcs of precipitation in the gamma region.

Reagents

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 a preservative.

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

Precautions and Disclaimer

Due to 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/Stability

Store at 2-8 °C. Do Not Freeze.

Product Profile

1. ELISA
   A minimum titer of 1:20,000 is determined by 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 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. C 3041).
   Substrate: *p*-Nitrophenyl Phosphate (pNPP, Product No. N 2765), 1.0 mg/ml in 10% diethanol-amine buffer, pH 9.8, containing 0.5 mM $MgCl_2$.
2. Dot Blot
   a. A dilution of 1:30,000 was determined by a direct dot blot assay using 20 ng human IgG per dot.
   b. A 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 dilution of 1:50 is determined by a direct assay using formalin-fixed, paraffin-embedded human tonsil sections.

In order to obtain best results, it is recommended that each individual user determine the working dilution for their system by titration assay.

References

1. Voller, A., et al., Bull. World Health Organ., **53**, 55 (1976).

JWM/KMR 05/02