

Product No. A 2293
Lot 057H4851

Anti-Guinea Pig IgG (whole molecule)
Alkaline Phosphatase Conjugate
Antibody developed in Rabbit
IgG Fraction of Antiserum

Antiserum is developed in rabbit using IgG isolated from pooled normal guinea pig serum 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-guinea pig IgG is conjugated to Sigma Alkaline Phosphatase using 0.2% glutaraldehyde. The conjugate is provided as a solution in 0.05 M Tris buffer, pH 8.0, containing 1% BSA, and 1 mM MgCl₂, with 0.1% sodium azide (see MSDS)* as preservative.

Specificity

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

Identity and Purity

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 in the gamma region.

Titers

1. 1:15,000 Direct ELISA)

Titer is defined as the dilution of stock conjugate sufficient to give an absorbance of 1.0 at 405 nm in 30 minutes of substrate conversion at 25°C.² Microtiter plate wells are coated with guinea pig IgG at a concentration of 5 µg/ml. Coating buffer is 0.05 M carbonate/bicarbonate buffer, pH 9.6 (Carbonate/Bicarbonate Buffer Capsules are available as Sigma Product No. C 3041).

Substrate: *p*-Nitrophenyl Phosphate (pNPP, Sigma Product No. N-2765), 1.0 mg/ml in 10% diethanolamine buffer, pH 9.8, containing 0.5 mM MgCl₂.

2. Dot Blot

- a. A dilution of 1:15,000 was determined in a direct assay on a 20 ng dot of guinea pig IgG.
- b. A dilution of 1:15,000 was determined in an indirect assay on a 20 ng dot of peroxidase and guinea pig anti-peroxidase as the primary antibody.

3. Immunohistology

A dilution of 1:100 was determined on formalin-fixed, paraffin-embedded sections of human pancreas using Guinea Pig Anti-Pig Insulin (Sigma Product No. I-8015) as the primary antibody.

Working Dilution

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

Store at 2-8°C. **Do Not Freeze.**

Reference

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

*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.