Product Information

Monoclonal Anti-Rabbit Immunoglobulins–Peroxidase Antibody Produced in Mouse

Clone RG-16, Purified Immunoglobulin, Lyophilized Powder

A2074

Product Description

Monoclonal Anti-Rabbit Immunoglobulins (mouse IgG1 isotype) is derived from the RG-16 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from mice immunized with rabbit IgG. The immunoglobulin fraction of the ascites fluid is conjugated to horseradish peroxidase by protein cross-linking with 0.2% glutaraldehyde.

Monoclonal Anti-Rabbit Immunoglobulins-Peroxidase recognizes an epitope located on the heavy chain of rabbit IgG, IgM, and IgA. Reduction of rabbit immunoglobulins appears to destroy the epitope. No cross-reaction is observed with human serum or tissue components, or with IgG from the following species: human, guinea pig, rat, bovine, turkey, goat, sheep, horse, dog, chicken, pig, and cat.

Rabbit antibodies against numerous analytes are widely used as primary antibodies in many research techniques. Polyclonal antibodies that are commonly used to detect these antibodies often lack specificity to rabbit immunoglobulins and may recognize non-related immunoglobulins appearing in the tested preparation. This is often observed when the tested preparation is of human origin. The use of peroxidase conjugated monoclonal antibody to rabbit immunoglobulins, which is devoid of any binding capacity to human and many other species, can serve as an essential tool in most applications, especially immunohistology.

Monoclonal Anti-Rabbit Immunoglobulins-Peroxidase may be used for the localization of rabbit IgG, IgM, and IgA using various immunochemical assays including ELISA, immunohistochemistry, and immunoblotting.

Reagent

Lyophilized from 0.01 M sodium phosphate buffer, pH 7.4, containing 1% bovine serum albumin and 0.05% MIT.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses.

Storage/Stability

Store the product at 2-8 °°C. After reconstitution, the solution may be stored frozen in working aliquots. Repeated freezing and thawing is not recommended. If slight turbidity occurs upon prolonged storage clarify the solution by centrifugation before use.

Preparation

Instructions to one vial of lyophilized powder, add 0.5 mL of deionized water. Rotate vial gently until powder dissolves.

Product Profile

Direct ELISA

A working antibody dilution of 1:30,000 was determined. 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.[1]

Microwell plates are coated with rabbit 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 C3041.

Substrate

o-Phenylenediamine Dihydrochloride (OPD, P8287), 0.4 mg/mL in 0.05 M phosphate citrate buffer, pH 5.0, containing 0.03% sodium perborate.

Phosphate Citrate Buffer with Sodium Perborate capsules are available as P4922.

Immunoblotting

A working antibody dilution of 1:160.000-1:320,000 is determined using a total cell extract of HeLa cells (5-10 µg per well) in an immunoblot assay detecting Actin.

Immunohistochemistry

A working antibody dilution of 1:100 was determined in an indirect assay using formalin-fixed, paraffin-embedded human tonsils. Anti-Human IgG (I8635) was used as the primary antibody.

Note: 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.

References

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

Notice

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