



Product Information

MONOCLONAL ANTI-RAT κ & λ LIGHT CHAINS PEROXIDASE CONJUGATE CLONES RT-39 & RL-6 Ig Fraction of Mouse Ascites Fluid

Product Number **A 1687**

Product Description

Peroxidase Monoclonal Anti-Rat κ & λ Light chains is a mixture of Monoclonal Anti-Rat κ Light Chain and Monoclonal Anti-Rat λ Light Chain conjugated to horseradish peroxidase. Monoclonal anti-rat κ is derived from the RT-39 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with rat kappa light chain. Monoclonal anti-rat λ is derived from the RL-6 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with rat lambda light chain. The immunoglobulin fractions of the two ascites fluids are conjugated to peroxidase by protein cross linking with 0.2% glutaraldehyde.

Peroxidase Monoclonal Anti-Rat κ + λ Light Chains reacts specifically with epitopes located on the rat κ light chains and rat λ light chains on the various rat immunoglobulin classes and subclasses. No cross-reaction observed with IgG preparations of human, rabbit, mouse, goat and sheep.

Reagents

The conjugated antibodies are lyophilized from a solution of 1% BSA containing 0.01% thimerosal as preservative.

Precautions and Disclaimer

Consult the MSDS for information regarding hazards and safe handling practices.

Preparation Instructions

To one vial of lyophilized powder, add 0.5 ml of deionized water. Rotate vial gently until powder dissolves.

Storage/Stability

Prior to reconstitution, 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.

Product Profile

Enzyme Activity: Minimum 500 purpurogallin units/ml
Enzyme activity is determined using 5% pyrogallol (Product No. P 0381) in deionized water, pH 6.0, at 20 °C. One purpurogallin unit will form 1 mg of purpurogallin from pyrogallol in 20 seconds at pH 6.0, 20 °C.

1. Direct ELISA: Minimum 1:40,000
Microtiter plates are coated with purified rat IgG at a concentration of 5 μ g/ml in 0.05 M carbonate-bicarbonate buffer, pH 9.6 (carbonate-bicarbonate buffer capsules are available as Product No. C 3041). 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
Substrate: *o*-Phenylenediamine Dihydrochloride (OPD, Product No. P 8287), 0.4 mg/ml in 0.05 M phosphate-citrate buffer, pH 5.0, containing 0.03% sodium perborate (phosphate-citrate buffer capsules with sodium perborate are available as Product No. P 4922).
2. Dot Blot
 - a. A minimum working dilution of 1:4,000 was determined in a direct assay using rat IgG or rat κ or λ light chains (50-500 ng/dot).
 - b. A minimum working dilution of 1; 20,000 was determined in a direct assay using 50-500 ng of rat κ light chains, rat λ light chains or normal rat IgG/dot. Luminol plus enhancer was used as substrate.
3. Immunohistology
A minimum working dilution of 1:100 was determined in an indirect assay using formalin-fixed, paraffin-embedded human tonsils. Rat anti-human IgG is used as the primary antibody.

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).

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