

Product Information

Monoclonal Anti-Rat Kappa & Lambda Light Chains—Alkaline Phosphatase Clone RT-39/RL-6

produced in mouse, purified immunoglobulin

Catalog Number **A1062**

Product Description

Monoclonal Anti-Rat Kappa Light Chain (1a+1b) (mouse IgG1 isotype) is derived from the RT-39 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with purified rat IgG. Monoclonal Anti-Rat Lambda Light Chain (mouse IgG2a isotype) is derived from the RL-6 hybridoma produced by the fusion of mouse myeloma cells and splenocytes from BALB/c mice immunized with purified rat IgG. The isotypes are determined using Sigma Mouse Monoclonal Antibody Isotyping Reagents, Catalog Number ISO2.

The product is a solution of alkaline phosphatase (calf intestine) conjugated Monoclonal Anti-Rat Kappa Light Chain and alkaline phosphatase conjugated Monoclonal Anti-Rat Lambda Light Chain. Conjugates are prepared with the immunoglobulin fractions of the monoclonal antibodies.

Monoclonal Anti-Rat Lambda Light Chain recognizes an epitope located on the rat λ light chain on the various rat immunoglobulin classes and subclasses. The antibody detects the λ light chain derived from normal serum or myeloma proteins, but not the κ light chains. Weak cross-reaction is observed by indirect ELISA with guinea pig immunoglobulins but not with IgG preparation of human, bovine, cat, chicken, dog, goat, horse, mouse, pig, rabbit or sheep. It localizes the denatured-reduced molecule when applied in immunoblotting. The antibody is also applicable as a secondary antibody in immunohistochemistry of human tissue since it does not react against the tissue itself. Monoclonal Anti-Rat Kappa Light Chain (1a+1b) recognizes an epitope located on the rat κ light chain (1a and 1b allotypes) on the various rat immunoglobulin classes and subclasses. The antibody detects the κ light chains derived from normal serum or myeloma proteins, but not the rat λ chains. It localizes the

denatured-reduced molecule when applied in immunoblotting. Weak cross-reaction is observed with guinea pig immunoglobulins, but not with IgG preparations from human, bovine, cat, chicken, dog, goat, horse, mouse, pig, rabbit, or sheep when tested by indirect ELISA. The antibody is also applicable as a secondary antibody in immunohistochemical staining of human tissue where it does not react against the tissue itself.

Monoclonal Anti-Rat Kappa & Lambda Light Chains—Alkaline Phosphatase may be used for the localization of light chains on rat immunoglobulins using various immunochemical assays such as ELISA, immunohistochemistry, and dot immunobinding assay.

Reagent

Solution in 0.05 M Tris buffer, pH 8.0, containing 1 mM $MgCl_2$, 1% BSA, 50% glycerol, and 15 mM sodium azide as a preservative.

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

Store at 2-8 °C.

Product Profile

Direct ELISA: a working antibody dilution of at least 1:12,000 is determined using 5 μ g/mL freshly prepared rat myeloma proteins containing the κ and λ light chains and normal rat immunoglobulins coated on microtiter plates.

Note: Second antibodies against mouse immunoglobulins may cross-react with the rat protein coated on the microtiter plate unless properly adsorbed with rat immunoglobulins.

Dot blotting: a minimum antibody dilution of 1:20,000 is determined by direct assay, using 2.5-40 ng/dot rat IgG or rat κ , λ light chains. A dilution of 1:80,000 is determined by indirect assay using 2.5-20 ng/dot human IgG and rat anti-human IgG as the primary antibody with chemiluminescent detection.

Indirect immunohistochemistry: a working antibody dilution of 1:50 is determined using formalin-fixed, paraffin-embedded sections of human tonsil and rat anti-human IgG as the primary antibody.

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