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ProductInformation

Monoclonal Anti-Rat κ + λ Light Chains
Clones RT-39 + RL-6
FITC Conjugate
Immunoglobulin Fractions of Mouse Ascites Fluids

Product No. **F5273**

Product Description

Monoclonal Anti-Rat κ 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 puri-fied rat IgG. Monoclonal Anti-Rat λ 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 ImmunoType™ Kit (Product Code ISO-1) and by a double diffusion immunoassay using Mouse Monoclonal Antibody Isotyping Reagents (Product Code ISO-2).

The product is a solution of FITC Conjugated Monoclonal Anti-Rat κ Light Chain and FITC Conjugated Monoclonal Anti-Rat λ Light Chain. Conjugates are prepared using the immunoglobulin fractions of the mouse ascites fluids.

Monoclonal Anti-Rat λ 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 and 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 κ 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 and 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.

FITC Monoclonal Anti-Rat κ + λ Light Chains, which is devoid of any binding capacity to human, mouse and many other species may serve as an essential tool in the localization of light chains on rat immunoglobulins using various immunochemical assays such as fluroescent dot binding immunoassay (FDIBA), immunocytochemistry, immunohistochemistry and Flow Cytometry.

Reagents

The product is supplied as a solution in 0.01 M phosphate buffer, pH 8.0, containing 1% bovine serum albumin and 15 mM sodium azide as a preservative.

Product Profile

1. FDIBA: A working dilution of 1:40 - 1:80 was determined on 1 µg/dot of rat κ/λ myelomas.
2. Immunohistology: A working dilution of 1:40 - 1:80 was determined using a primary rat antibody on formalin-fixed, paraffin-embedded sections of human tonsil.

In order to obtain best results in different techniques and preparations, we recommend to determine optimal working dilutions by titration test.

Storage

For continuous use, store at 2-8 °C for up to one month. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing is **not** recommended. Storage in "frost-free" freezers is **not** recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

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