

Anti-Human Lambda Light Chain - FITC

Clone: Mc24-IC6

REFERENCES AND PRESENTATIONS

- **concentrated**
MAD-165781QF-1
(1:10 – 1:50 Recommended Dilution)

COMPOSITION

Anti-human Mouse Antibody to Lambda Light Chain. Fluorescein Conjugated Monoclonal antibody purified from serum and prepared in buffer with carrier protein and preservative for stabilization.

INTENDED USE: Immunofluorescence (IF) on frozen tissue sections. Not tested on paraffin sections or Western-Blotting.

CLONE: Mc24-IC6 (identified in the batch field of the product label)

Ig ISOTYPE: IgG1.

IMMUNOGEN: Purified human IgG.

SPECIES REACTIVITY: In vitro diagnostics in humans. Not tested in other species

DESCRIPTION AND APPLICATIONS:

All five immunoglobulin classes share the same basic four polypeptide chain structure of two heavy-chains and two light chains. There are five heavy chain types, and two light-chain types (Kappa and Lambda) both having a molecular weight of 22.5kDa. Any heavy-chain type can associate with either light-chain type, but on any immunoglobulin molecule both light-chains are of the same type. Kappa and Lambda consist of a variable region and a constant region and can easily be differentiated by the antigenic properties of the constant region. The ratio of Kappa to Lambda is 70:30, the vast majority of which is bound to heavy-chain in immunoglobulin. In normal individuals low levels of free light-chain are present in serum (kappa, 1.6-15.2 mg/L; Lambda, 0.4-4.2mg/L), with the occurrence of multiple myeloma or other B-cell malignancies these levels can be greatly elevated and can be found at high levels in the urine (Bence-Jones proteins).

This antibody should be used in conjunction with a panel of antibodies to aid in the identification of Lambda light chain of immunoglobulin in target tissue (e.g., in the diagnosis of renal or dermal pathologies). The interpretation of the results should be always corroborated with those of external controls and integrated with the morphological and clinical aspects for the final diagnosis.

POSITIVE CONTROL: Normal tonsil

EXTERNAL NEGATIVE CONTROL:

Tissue sample homologous to the test sample

incubated with an antibody isotype not specific for Lambda Light Chain-FITC

VISUALIZATION: membranous and secreted

IF recommended procedure:

- **Type of sample:** Antibodies can be used with direct immunofluorescence techniques on tissue cryostat sections.
- **Recommended dilution:** 1/10-1/50 and 30-60 minutes of incubation at room temperature using a humid incubation chamber in the dark. *However, optimal dilution for specific applications must be determined by each laboratory.*
- **Preparation of the sample:**
- Air-dry the cryostat sections taken on charged slides and fix them in acetone at 4 °C for 10 minutes.
Note: If you do not continue with the staining, keep them in the freezer.
- If you continue with the staining, after the fixation in acetone, air-dry again.
- Once the technique is started, keep the sections moist with TBS washing solution.
- Remove the TBS and incubate the sample with the antibody for 30-60 minutes with enough volume to cover the tissue section with the conjugated antibody.
The optimal protocol for specific applications must be determined by each laboratory.
- **Visualization of immunostaining:** Antibodies conjugated to FITC have a maximum absorption at 490 nm and absorption of 520 nm (apple green color) so their observation must be performed in a fluorescence microscope equipped with appropriate filters and in the dark.

STORAGE AND STABILITY: ⏰ See the expiration date printed on product label.

🧊 Stored at 2-8 °C in the dark.

WARNINGS AND PRECAUTIONS:

1. Avoid contact of reagents with eyes and mucous membranes. If reagents come into contact with sensitive areas, wash with copious amounts of water.
2. This product is harmful if swallowed.
3. Consult local or state authorities with regard to recommended method of disposal.
4. Avoid microbial contamination of reagents.



SAFETY RECOMMENDATIONS

This product is intended for laboratory professional use only. The product is NOT intended to be used as a drug or for domestic purposes. The current version of the Safety Data Sheet for this product can be downloaded by searching the reference number at www.vitro.bio or can be requested at regulatory@vitro.bio.

BIBLIOGRAPHY

1. Bancroft JD. Theory and Practice of Histological Techniques. Churchill-Livingstone. 5ªed. pp 579-591 (2002).
2. 1. The and Feltkamp, Immunology 18; 865, 1970. (Conjugation)

LABEL AND BOX SYMBOLS

Explanation of the symbols of the product label and box:

	Expiration date
	Temperature limit
	Manufacturer
	Sufficient content for <n> assays
	Catalog number
	Lot code
	Refer to the instructions of use
	Medical product for <i>in vitro</i> diagnosis.
	Material safety data sheet
	Keep away from sunlight