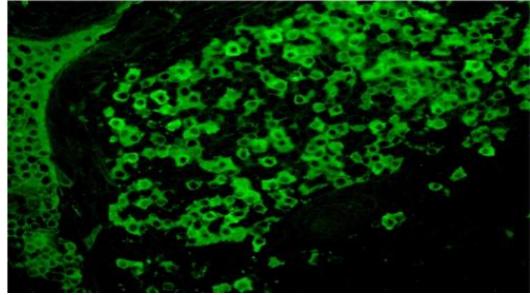


Lambda\FITC

Catalog No.	Format	Dilution	Volume
G-3010-3	Prediluted	Ready-to-use	3.0 mL
G-3010-7	Prediluted	Ready-to-use	7.0 mL
G-3010-15	Prediluted	Ready-to-use	15.0 mL
G-3010-01	Concentrated	1:25–1:100	0.1 mL
G-3010-05	Concentrated	1:25–1:100	0.5 mL
G-3010-1	Concentrated	1:25–1:100	1.0 mL



Inset: IHC of Lambda\FITC on a FFPE Tonsil Tissue

Intended Use

This antibody is intended strictly for Research Use Only (RUO), suitable for immunohistochemical applications on:

- Formalin-fixed paraffin-embedded (FFPE) tissues
- Frozen tissue sections
- Cell preparations

Results must be interpreted by trained medical professionals.

Immunogen

Developed using purified human Lambda Light Chains isolated from human serum.

Product Overview

Lambda antibodies identify surface immunoglobulin on both normal and malignant B-cells. Lambda staining typically appears in B-cell follicles within lymphoid tissues.

Light chain analysis plays a vital role in diagnosing B-cell neoplasms:

- Most B-cell lymphomas express either kappa or lambda light chains exclusively.
- In contrast, reactive proliferations feature a mixed population of kappa- and lambda-positive cells.
- Monoclonality is suspected when:
 - Kappa-to-lambda ratio $\geq 3:1$
 - Lambda-to-kappa ratio $\geq 2:1$
 - Over 75% of cells express a single light-chain type.

Additionally, immune complex-mediated glomerulonephritis (such as lupus nephritis) often shows positive immunofluorescence for IgG, IgA, IgM, C3, C1, and either kappa or lambda light chains.



Product Features

- **Type:** Rabbit Polyclonal Antibody
- **Isotype:** IgG
- **Localization:** Cytoplasmic
- **Species Reactivity:** Human
- **Application Areas:** Lymphoma diagnostics, transplant rejection, autoimmune disorders
- **Positive Control Tissues:** Tonsil, Lymph Node

Storage Instructions

- Store antibody at 2–8°C.
- Control slides should be stored at 20–25°C.
- Avoid exposure to fluctuating or room temperatures for extended periods.

Specimen Preparation

FFPE Tissues:

- Use formalin-fixed, paraffin-embedded tissue sections.
- Pre-treat with antigen retrieval using GeneBio Retriever.
- Hydrate using Bio SB Immuno/DNA Washer solutions.

Frozen Sections:

Use acetone fixation for best results.

Immunohistochemical (IHC) Protocol

Preparation:

1. Mount 3–5 micron FFPE sections onto positively charged slides.
2. Air dry for 2 hours at 58°C.
3. Deparaffinize and rehydrate.
4. Perform Antigen Retrieval using GeneBio Antigen Retriever solutions.

Antigen Retrieval Methods:

1. Pressure Cooker: 15 min
2. Water Bath (95–99°C): 30–60 min
3. Conventional Steamer: 30–60 min

Allow slides to cool for 15–20 minutes at room temperature after retrieval.

Precautions

- For trained professionals only.
- Contains <0.1% sodium azide—handle with appropriate safety precautions.
- Always wear PPE.
- Refer to the Safety Data Sheet and CDC guidelines for biological specimen handling.

Limitations

Performance may vary depending on fixation, retrieval method, antibody dilution, and tissue type. Always validate results with positive and negative controls under the supervision of qualified personnel

