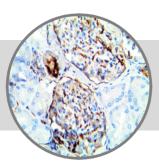
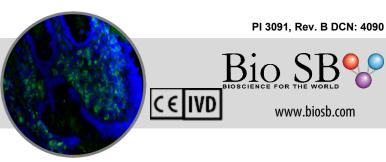
# Kappa Clone: Polyclonal Rabbit Polyclonal





Inset: IHC and IF of Kappa on a FFPE Kidney Tissue (IHC) and on a Frozen Colon Tissue (IF with FluoroMounter DAPI)

# **Intended Use**

For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical (IHC) and Immunofluorescence (IF) applications on formalin-fixed paraffin-embedded tissues (FFPE), frozen tissue sections and cell preparations. Interpretation of results should be performed by a qualified medical professional.

# **Immunogen**

Purified Kappa Light Chains from human myeloma serum.

# **Summary and Explanation**

Kappa detects surface immunoglobulin on normal and neoplastic B-cells. In paraffinembedded tissue, Kappa exhibits strong staining of kappa-positive plasma cells and cells that have absorbed exogenous immunoglobulin.

When studying B-cell neoplasms, the determination of light-chain ratios remains the centerpiece. This is sound reasoning because most B-cell Lymphomas express either Kappa or Lambda light chains, whereas reactive proliferations display a mixture of Kappa and Lambda-positive cells. If only a single light-chain type is detected, a lympho-proliferative disorder is very likely. Monoclonality is determined by a Kappa-Lambda ratio greater than or equal to 3:1, a Lambda-Kappa ratio greater than or equal to 2:1, or a monoclonal population of 75% or more of the total population. In IgG-dominant immune complex-mediated glomerulonephritis, there are multiple pathological findings that strongly suggest the diagnosis of Lupus Nephritis including immunofluorescence staining for IgG, IgM, IgA, Kappa or Lambda, C3 and C1.

Antibody Type	Rabbit Polyclonal	Clone	Polyclonal	
Isotype	lgG	Reactivity	Paraffin, Frozen	
Localization	Cytoplasmic	Control	Tonsil, Lymph Node	
	Species Reactivity	Human, Dog, Cat		

### **Precautions**

- 1. For professional users only. Results should be interpreted by a qualified medical professional.
- 2. This product contains <0.1% sodium azide (NaN<sub>3</sub>) as a preservative. Ensure proper handling procedures are used with this reagent.
- 3. Always wear personal protective equipment such as laboratory coat, goggles and gloves when handling reagents.
- 4. Dispose of unused solution with copious amount of water.
- 5. Do not ingest reagent. If reagent is ingested, seek medical advice immediately.
- 6. Avoid contact with eyes. If contact occurs, flush with large quantities of water.
- 7. Follow safety precautions of the heating device used for epitope retrieval (TintoRetriever Pressure Cooker or similar).
- 8. For additional safety information refer to Safety Data Sheet for this product.
- 9. For complete recommendations for handling biological specimens, please refer to the CDC document, "Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories" (see References in this document).

### **Presentation**

Kappa is a purified immunoglobulin fraction of rabbit antiserum that is filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Catalog No.	Antibody Type	Suggested Dilution IHC/IF	Volume/Qty
BSB 3086	Tinto Predilute	Ready-to-Use*	3.0 mL
BSB 3087	Tinto Predilute	Ready-to-Use*	7.0 mL
BSB 3088	Tinto Predilute	Ready-to-Use*	15.0 mL
BSB 3089	Concentrate	1:500 / 1:5	0.1 mL
BSB 3090	Concentrate	1:500 / 1:5	0.5 mL
BSB 3091	Concentrate	1:500 / 1:5	1.0 mL

<sup>\*</sup>Ready to use, for IHC only

# **Control Slides Available**

Catalog No.	Quantity		
BSB 3688	5 slides		

**Storage** Store at 2-8°C (Control Slides: Store at 20-25°C)

### Stability

**This product is stable up to the expiration date on the product label.** Do not use after expiration date listed on package label. Temperature fluctuations should be avoided. Store appropriately when not in use, and avoid prolonged exposure to room temperature conditions.

### **Specimen Preparation**

**Paraffin sections:** The antibody can be used on formalin-fixed paraffin-embedded (FFPE) tissue sections. Ensure tissue undergoes appropriate fixation for best results. Pre-treatment of tissues with heat-induced epitope retrieval (HIER) is recommended using Bio SB ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023), ImmunoDNA Retriever with EDTA (BSB 0030-BSB 0033) or ImmunoDNA Digestor (BSB 0108-0112). See reverse side for complete protocol. Tissue should remain hydrated via use of Bio SB Immuno/DNA Washer solutions (BSB 0029 & BSB 0042).

**Frozen sections and cell preparations:** The antibody can be used for labeling acetone-fixed frozen sections and acetone-fixed cell preparations.

# **Staining Procedure**

# **Preparation for Frozen Tissues**

- 1. Embed the specimen in OCT inside a cryostat.
- 2. Cut sections at 4-5 microns a and mount on a positively charged glass slide such as the Bio SB Hydrophilic Plus Slides (BSB 7028).
- 4. Air dry at 58-60 °C for 10 minutes.
- 5. Fix in acetone 100% for 2-10 minutes.
- 6. Air dry for another 2 minutes.

# **Preparation for FFPE Tissues**

- 1. Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positively charged slides such as Bio SB Hydrophilic Plus Slides (BSB 7028).
- 2. Air dry for 2 hours at 58° C.
- 3. Deparaffinize, dehydrate and rehydrate tissues.
- 4. Subject tissues to heat induced epitope retrieval (HIER) using a suitable retrieval solution such as ImmunoDNA Retriever with Citrate (BSB 0020-BSB 0023) or EDTA (BSB 0030-BSB 0033).
- 5. Any of three heating methods may be used:

#### a. TintoRetriever Pressure Cooker or Equivalent

Place tissues/slides in a staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA, and place on trivet in the pressure cooker. Add 1-2 inches of distilled water to the pressure cooker and turn heat to high. Incubate for 15 minutes. Open and immediately transfer slides to room temperature.

#### b. TintoRetriever PT Module or Water Bath Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA at 95°-99° C. Incubate for 30-60 minutes.

#### c. Conventional Steamer Method

Place tissues/slides in a pre-warmed staining dish or coplin jar containing the ImmunoDNA Retriever with Citrate or EDTA in a steamer, cover and steam for 30-60 minutes.

- 6. After heat treatment, transfer slides in ImmunoDNA Retriever with Citrate or EDTA to room temperature and let stand for 15-20 minutes.
- 7. Wash slides with ImmunoDNA washer or DI water.
- 8. For manual staining, perform antibody incubation in the dark at ambient temperature. For automated staining methods, perform antibody incubation according to instrument manufacturer's instructions.
- 9. Continue with IHC or IF staining protocol.

# **Abbreviated Immunohistochemical Protocol**

Step	ImmunoDetector	PolyDetector	PolyDetector	
	AP/HRP	AP/HRP	Plus AP/HRP	
Peroxidase/AP Blocker	5 min.	5 min.	5 min	
Primary Antibody	30-60 min.	30-60 min.	30-60 min.	
1st Step Detection	10 min.	30-45 min.	15 min.	
2nd Step Detection	10 min.	Not Applicable	15 min.	
Substrate-Chromogen	5-10 min.	5-10 min.	5-10 min.	
Counterstain / Coverslip	Varies	Varies	Varies	

### Abbreviated Immunofluorescence Protocol

Step	Incubation Time		
Rinse slides in IF wash buffer	5 min		
Apply Antibody	30-60 min.		
Rinse with 3 changes of IF wash buffer	3 x 5 min. each		
Apply Rabbit FluoroDetector FITC	15 min.		
Rinse with 3 changes of IF wash buffer	3 x 5 min. each		
Coverslip with FluoroMounter medium			

# **Mounting Protocols**

# IHC:

For detailed instructions using biodegradable permanent mounting media such as XyGreen PermaMounter (BSB 0169-0174) or organic solvent-based resin such as PermaMounter (BSB 0094-0097), refer to Pl0174 or Pl0097.

### IF:

- 1. Bring FluoroMounter or FluoroMounter with DAPI to room temperature.
- 2. Rinse slides with distilled or deionized water.
- 3. Remove excess of water from slides before laying them flat in the dark.
- 4. Turn the media bottle upside down before opening the dropper bottle.
- 5. Apply 1-3 drops of FluoroMounter to each slide making sure the specimen is covered.
- 6. Incubate 3-5 minutes at room temperature in the dark.
- 7. Coverslip.
- 8. Observe under a fluorescent microscope using the appropriate filters.
- 9. The slides are recommended to be stored at 2-8 °C in the dark.

# **Product Limitations**

Due to inherent variability present in immunohistochemical and immunofluorescent procedures (including fixation time of tissues, dilution factor of antibody, retrieval and detection system used and incubation time), optimal performance should be established using positive and negative controls. Results should be interpreted by a qualified medical professional.

# References

- 1. Michie SA et al. A J Clin Path. 1987
- 2. Hertel BF, et al. Lab Invest. 1977;36:12
- 3. Taylor CL, Arch Pathol Lab Med. 1978;12:113-121
- 4. Dogan A, Blood. 1998; 91:4708-14
- 5. Huerta A, eta al. Renal-limited 'lupus-like' nephritis. Nephrol Dial Transplant (2012) 27: 2337–2342
- 6. U.S. Department of Health and Human Services: Centers for Disease Control and Prevention. Guidelines for Safe Work Practices in Human and Animal Medical Diagnostic Laboratories. Supplement / Vol. 61, January 6, 2012.

# Symbol Key / Légende des symboles/Erläuterung der Symbole

EC REP Prin	MERGO EUROPE nsessegracht 20 4 AP The Hague The Netherlands	Storage Temperature Limites de température Zulässiger Temperaturbereich	3	Manufacturer Fabricant Hersteller	REF	Catalog Number Référence du catalogue Bestellnummer
IVD In Vitro Diagnostic Dispositif médical de dia		Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	$\geq$	Expiration Date Utiliser jusque Verwendbar bis	LOT	Lot Number Code du lot Chargenbezeichnung

