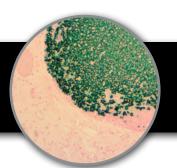
CE IVD





Inset: IHC of CD20 on a FFPE Colon Tissue

Intended Use

For In Vitro Diagnostic Use.

This antibody is intended for use in Immunohistochemical 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

Human tonsil B cells.

Summary and Explanation

CD20 is a transmembrane, non-glycosylated protein expressed on B-cell precursors and mature B-cells, but lost following differentiation into plasma cells. This antibody does not cross-react with non-hematopoietic neoplasms. CD20 (B-cell Pan) reacts with a membrane antigen present in B-cells.

This antibody strongly recognizes Reed-Sternberg cells predominant in Hodgkin's disease. Since no staining of histiocytes or plasma cells has been observed and CD20 has not been detected in T-cell malignancies, it is a very strong marker of B-cell Lymphomas. B-cell Panmarker recognizes a formalin-resistant intracytoplasmic antigen.

Antibody Type	Mouse Monoclonal	Clone	L26
Isotype	IgG2a/K	Reactivity	Paraffin, Frozen
Localization	Membranous	Control	Tonsil, Lymph Node
Species Reactiv	ity	Human, Canine, Feline, Mouse	

Presentation

CD20 is a mouse monoclonal antibody derived from cell culture supernatant that is concentrated, dialyzed, filter sterilized and diluted in buffer pH 7.5, containing BSA and sodium azide as a preservative.

Presentations

Catalog Num.	Antibody Type	Dilution	Volume/Qty
BSB 5190	Tinto Prediluted	Ready-to-Use	3.0 mL
BSB 5191	Tinto Prediluted	Ready-to-Use	7.0 mL
BSB 5192	Tinto Prediluted	Ready-to-Use	15.0 mL
BSB 5193	Concentrated	1:250 - 1:1000	0.1 mL
BSB 5194	Concentrated	1:250 - 1:1000	0.5 mL
BSB 5195	Concentrated	1:250 - 1:1000	1.0 mL
BSB 5196	Control Slides	Not Applicable	5 slides

Precautions

- **1.** For professional users only. Ensure results are interpreted by a medical professional.
- **2.** This product contains sodium azide (NaN3), a toxic chemical which may react with plumbing to form highly explosive build-ups of metal azides. Upon disposal, flush with large volumes of water to prevent sodium azide build-up.
- **3.** Ensure proper handling procedures are used with reagent. Always wear proper laboratory equipment such as laboratory coat and gloves when handling reagents.
- **4.** Unused solution should be disposed of according to local and federal regulations.
- **5.** Do not ingest reagent. If reagent ingested, contact a poison control center immediately.
- **6.** 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" (4).

Storage

Store at 2-8 °C. 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 to ensure 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

- Cut and mount 3-5 micron formalin-fixed paraffin-embedded tissues on positive 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.
- Subject tissues to heat epitope retrieval 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 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.

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

Recommended IHC Protocol

Step	ImmunoDetector AP/HRP	PolyDetector AP/HRP	PolyDetector Plus 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	Varies	Varies	Varies

References

- 1. Ishii Y, et al. Clin Exp Immuno. 1984;58:183-192
- 2. Davey FR, et al. Am J Pathol. 1987;129:54-63
- 3. Mason DY, Am J Pathol. 1987;128:1-4
- 4. 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.

Performance Characteristics

Normal Tissues	Normal Tissues			
Positive (+)				
germinal center cells	mantle zone lymphocytes			
Scattered interfoll	icular lymphocytes			
Negat	tive (-)			
T cells	histiocytes			
plasma cells	epidermis			
sebaceous glands	hair follicles			
pneumocytes	eccrine glands in the skin			
follicular epithelium in the thyroid				
bronchial epithelium of the lung				
Abnormal Tissues				
Positive (+)				
mature B cells	Burkitt B-cell lymphomas			
Waldenstrom B-cell lymphomas	hairy cell leukemia 3/3			
Polymorphocytic leukemia 3/3	chronic lymphocytic leukemia 15/			
common acute lympho	blastic leukemias 14/34			
pre-B acute lymphoblastic leukemias 7/9				
lyphosarcoma co	ell leukemias 6/7			
B-cell malignant	lymphomas 45/46			
immunoblastic B-cell lymphomas 44/44				
All 40 B-cell lymphomas (except acute lymphoblastic leukaemias and malignant lymphoma plasmacytic)				
Reed-Sternber cells (Hodgkin's disease) 9/27				
Negative (-)				
acute undifferentiated leukaemias 0/6				
lymphoproliferative diseases of T-cell lineage 0/73, 1/18, and 1/111				
very immature lymphoid cells	myelomas 0/12			

Product Limitations

Due to inherent variability present in immunohistochemical procedures (including fixation time of tissues, dilution factor of antibody, retrieval method utilized and incubation time), optimal performance should be established through the use of positive and negative controls. Results should be interpreted by a medical professional.

Symbol Key / Légende des symboles/Erläuterung der Symbole

EMERGO EUROPE Prinsessegracht 20 2514 AP The Hague The Netherlands	2°C	Storage Temperature Limites de température Zulässiger Temperaturbereich	•••	Manufacturer Fabricant Hersteller	REF	Catalog Number Référence du catalogue Bestellnummer
In Vitro Diagnostic Medical Device Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	\mathbf{i}	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten		Expiration Date Utiliser jusque Verwendbar bis	LOT	Lot Number Code du lot Chargenbezeichnung



D10 3D