

Inset: IHC of WT1 on a FFPE Testicular Cancer Tissue

Intended Use

For In Vitro Diagnostic Use.

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

Immunogen

Recombinant protein corresponding to amino acids 1-181 of human WT1.

Summary and Explanation

Wilms' Tumor Protein (WT1) is a suppressor gene located on Chromosome 11p13. Mutations of the WT1 gene on Chromosome 11 are observed in approximately 20% of Wilms tumors. At least half of the Wilms tumors with mutations in WT1 also carry mutations in CTNNB1, the gene encoding the proto-oncogene beta-catenin.

Wilms' tumor is a neoplasm of the kidneys that typically occurs in children. It is also known as a Nephroblastoma. WT1 has been identified in proliferative mesothelial cells, Malignant Mesothelioma, Ovarian Cystadenocarcinoma, Gonadoblastoma, Nephroblastoma and Desmoplastic Small Round Cell Tumor. Lung Adenocarcinomas rarely stain positive with this antibody.

Antibody Type	Mouse Monoclonal	Clone	6F-H2		
lsotype	lgG1/K	Reactivity	Paraffin, Frozen		
Localization	Nuclear	Control Testicle, Fallopian Tuk Kidney, Malignant Mesothelioma			
Species Reactivity		Human			

Presentation

WT1 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.

Catalog Num.	Antibody Type	Dilution	Volume/Qty
BSB 6029	Tinto Prediluted	Ready-to-Use	3.0 mL
BSB 6030	Tinto Prediluted	Ready-to-Use	7.0 mL
BSB 6031	Tinto Prediluted	Ready-to-Use	15.0 mL
BSB 6032	Concentrated	1:100 - 1:500	0.1 mL
BSB 6033	Concentrated	1:100 - 1:500	0.5 mL
BSB 6034	Concentrated	1:100 - 1:500	1.0 mL
BSB 6035	Control Slides	Not Applicable	5 slides

Precautions

Presentations

For professional users only. Ensure results are interpreted by a medical professional.
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.

 Ensure proper handling procedures are used with reagent. Always wear proper laboratory equipment such as laboratory coat and gloves when handling reagents.
Unused solution should be disposed of according to local and federal regulations.

Ondset solution should be disposed of according to local and rederal regulation
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" (6).

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

1. 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.

4. 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.

6. 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	

Performance Characteristics

Normal Tissues			
Positive (+)			
Kidney	Spleen		
Sertoli Cells of Testes	Decidual Cells of Uterus		
Granulosa Cells of Ovary	Myelocytic Cells		
Blood Vessels of Lung Alveoli			
Negative (-)			
Mononuclear Cells Peripheral CD34 Progenitor Cells			
Abnormal Tissues			
Positive (+)			
Wilms' Tumors (Epithelial and Blastemal Components)			
Malignant Mesothelioma			
Acute Leukemias			
Leukemia Blast Cells			

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.

References

1. Ordonez NG, Am J Surg Pathol. 2000;24(4):598-606

2. Ordonez NG, Am J Surg Pathol. 1998;22(11):1314-1327

3. Charles AK, Moore IE, Berry PJ, Histopathology. 1997; Apr; 30(4): 312-4

4. Hussong J, Crussi FG, Chou PM, Mod Pathol. 1997;Nov;10(11):1101-5

5. Barnoud R, Sabourin JC, Pasquir D, Ranchere D, Bailly C, Terier Lacombe MJ, Pasquier B, Am J Surg Pathol. 2000;Jun;24(6):830-6

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 EC	re d	Storage Temperature Limites de température Zulässiger Temperaturbereich	•••	Manufacturer Fabricant Hersteller	REF	Catalog Number Référence du catalogue Bestellnummer
In Vitro Diagnostic Medical Device IVD Dispositif médical de diagnostic in vitro In-Vitro-Diagnostikum	[]i	Read Instructions for Use Consulter les instructions d'utilisation Gebrauchsanweisung beachten	\mathbf{x}	Expiration Date Utiliser jusque Verwendbar bis	LOT	Lot Number Code du lot Chargenbezeichnung

Bio SB ??



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