

IVD DATA SHEET

Wilms' Tumor 1

Concentrated Rabbit Monoclonal Antibody

Intended Use:

For in Vitro Diagnostic Use

Epitomics' Rabbit Monoclonal Anti-Human Wilms' Tumor 1 (WT1), Clone EP122, is intended for use to qualitatively identify WT1 by light microscopy in sections of formalin-fixed, paraffin-embedded tissue using immunohistochemical detection methodology. Interpretation of any positive or negative staining must be complemented with the evaluation of proper controls and must be made within the context of the patient's clinical history and other diagnostic tests. Evaluation must be performed by a qualified pathologist.

Catalog number	Description	Dilution
AC-0115A	0.1 ml, concentrated	1:100-1:200
AC-0115B	0.5 ml, concentrated	1:100-1:200
AC-0115	1 ml, concentrated	1:100-1:200
AC-0115BULK	2 ml or more, concentrated	1:100-1:200

Immunogen: A recombinant protein fragment corresponding to amino acids 79-249 of human Wilm's Tumor was used as an immunogen.

Source: Rabbit Monoclonal Antibody

Clone ID: EP122

Isotype: Rabbit IgG

Application: Immunohistochemistry for formalin-fixed paraffin-embedded tissue

Summary and Explanation:

Wilms' Tumor 1 (WT1) is a transcription factor that plays an important role in cellular development and cell survival. The WT1 gene encodes a tumor suppressor gene inactivated in Wilms' tumor, recently implicated in WNT signaling through the enhancement of cytoplasmic beta-catenin (CTNNB1) degradation.

WT1 has been demonstrated in mesenchymal-derived cells and in Wilms' tumor. An antibody to WT1 is useful for the identification of malignant mesothelioma. A literature review of 88 published papers suggested that the sensitivity and specificity of WT-1 for the identification of epithelioid mesothelioma was 77% and 96%, respectively. WT1 immunoreactivity has also been detected in several types of other malignancies, including peritoneal serous carcinoma and carcinomas of the breast, ovarian, and leukemia. In hepatocellular carcinoma, the expression of WT1 is correlated with a response to chemotherapy.

Additionally, WT1 is a useful marker to differentiate desmoplastic small round cell tumors (DSRCT) from other small round cell tumors.

Reagent Provided:

Antibody to WT1 is affinity purified and diluted in 10 mM phosphate buffered saline (PBS), pH 7.2 containing 1% bovine serum albumin (BSA) and 0.09% sodium azide (NaN₃).

Storage and Stability:

Store at 2-8 °C. Don't use after expiration date provided on the vial. End user must validate any storage conditions other than those specified.

Procedures Recommended:

- 1. Pretreatment:** Epitope retrieval using Tris/EDTA buffer (catalog #: SP-0004) with a pressure cooker
- 2. Endogenous peroxidase block:** Block for 10 minutes at room temperature using peroxidase solution (catalog #: SP-0002).
- 3. Protein block:** Block for 10 minutes at room temperature using blocking solution (catalog #: SP-0003).
- 4. Primary antibody:** Incubate for 30 minutes.
- 5. Detection:** Follow instructions from the selected detection system (EpiPrecision™, a Biotin Streptavidin-HRP Detection, catalog #: DK-0001, 0003, or EpiVision™, a Rabbit Polymer Detection, catalog # DK-0002, 0004).

The antibody dilution and protocol may vary depending on the specimen preparation and specific application. Optimal conditions should be determined by the individual laboratory.

Performance Characteristics:

This antibody gives nuclear staining in positive cells. The recommended positive controls are Kidney for normal tissue and Mesothelioma for abnormal tissue.

Limitations:

Immunohistochemistry is a complex process. Variation in tissue selection, tissue processing, antigen retrieval, peroxidase activity, detection systems and improper counterstaining may cause variation in results.

References:

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