

## WT-1

Format	Catalog no.	Pack size	Dilution
Concentrated	GB 01W A,B, C	0.1,0.5,1.0ml	1:100
Prediluted	GB 01W AA	6.0 mL	Ready to use

### PRODUCT DESCRIPTION -

One gene that contributes to the development of Wilms' tumor is WT1. WT1 mRNA has been found in the kidney, spleen, and gonadal ridge mesoderm of healthy human tissues. Additionally, WT1 expression has been detected in ovarian granulosa cells and testicular sertoli cells. Wilms' tumors and most mesotheliomas have been shown to include WT1 (nuclear and paranuclear staining). The majority of acute leukemias have also been shown to include WT1, whereas cells from chronic myelogenous leukemia do not. In certain cancer cases, cytoplasmic staining has been seen; this could indicate cross-reactivity with an epitope unrelated to WT1.

### INTENDED USE -

Intended for In Vitro Diagnostic Applications

WT1 [rWT1/857] is a mouse monoclonal antibody that is intended for laboratory use in the qualitative identification of WT1 protein by immunohistochemistry (IHC) in formalin-fixed paraffin-embedded (FFPE) human tissues. The clinical interpretation of any staining or its absence should be complemented by morphological studies using proper controls and should be evaluated within the context of the patient's clinical history and other diagnostic tests by a qualified pathologist.

### SUMMARY AND EXPLANATION -

One gene that contributes to the development of Wilms' tumor is WT1. WT1 mRNA has been found in the kidney, spleen, and gonadal ridge mesoderm of healthy human tissues. Additionally, WT1 expression has been detected in ovarian granulosa cells and testicular sertoli cells. Wilms' tumors and most mesotheliomas have been shown to include WT1 (nuclear and paranuclear staining). The majority of acute leukemias have also been shown to include WT1, whereas cells from chronic myelogenous leukemia do not. In certain cancer cases, cytoplasmic staining has been seen; this could indicate cross-reactivity with an epitope unrelated to WT1.

## **PRINCIPLE OF PROCEDURE -**

This antibody product may be used as the primary antibody in immunohistochemistry testing of formalin-fixed, paraffin-embedded tissue sections. In general, immunohistochemical (IHC) staining techniques allow for the visualization of antigens via the sequential application of a specific antibody to the antigen (primary antibody), a secondary antibody to the primary antibody (optional link antibody/probe), an enzyme complex and a chromogenic substrate with interposed washing steps. The enzymatic activation of the chromogen results in a visible reaction product at the antigen site. The specimen may then be counterstained, and cover slipped. Results are interpreted using a light microscope and aid in the differential diagnosis of pathophysiological processes, which may or may not be associated with a particular antigen.

**SOURCE** -: Mouse monoclonal

**SPECIES REACTIVITY** - : Human; others not tested

**CLONE**- rWT1/857

**ISOTYPE**- IgG1/kappa

**PROTEIN CONCENTRATION** - Call for lot specific Ig concentration.

**EPITOPE/ANTIGEN** - Recombinant full-length human WT1 protein

**CELLULAR LOCALISATION** - Nuclear and cytoplasmic

**POSITIVE TISSUE CONTROL** - Wilms' tumor, mesothelioma, or normal kidney

**KNOWN APPLICATIONS**- Immunohistochemistry

30-40 min. At RT. Staining of formalin-fixed tissues requires heating tissue sections in between pH 7.4 - 9.0 for 45 min at 95°C followed by cooling at room temperature for 20 minutes.

**SUPPLIED AS** -Buffer with protein carrier and preservative

## **STORAGE AND STABILITY -**

Store at 2°C to 8°C. Do not use after expiration date printed on vial. If reagents are stored under conditions other than those specified in the package insert, they must be verified by the user. Diluted reagents should be used promptly; any remaining reagent should be stored at 2°C to 8°C



**Materials required but not provided -**

- 1) Positive tissue control - Wilms' tumor, mesothelioma, or normal kidney
- 2) Negative control tissue(internal or external)
- 3) Microscope slides and coverslips
- 4) Staining jars or baths
- 5) Timer
- 6) Xylene or xylene substitute
- 7) Ethanol or reagent alcohol
- 8) Deionized or distilled water
- 9) Heating equipment or enzyme for tissue pretreatment step
- 10)Detection system
- 11)Chromogen
- 12)Wash buffer
- 13)Hematoxylin
- 14)Antibody diluents
- 15)Peroxide block
- 16)Light microscope
- 17)Mounting medium

**LIMITATIONS -**

The optimum antibody dilution and protocols for a specific application can vary. These include, but are not limited to fixation, heat-retrieval method, incubation times, tissue section thickness and detection kit used. Due to the superior sensitivity of these unique reagents, the recommended incubation times and titers listed are not applicable to other detection systems, as results may vary. The data sheet recommendations and protocols are based on exclusive use of Genebio products. Ultimately, it is the responsibility of the investigator to determine optimal conditions.