

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human WTX in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG _{2B} Clone # 729419
Purification	Protein A or G purified from ascites
Immunogen	<i>E. coli</i> -derived recombinant human WTX Met421-Leu573 Accession # Q5JTC6
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

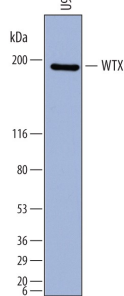
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	1 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

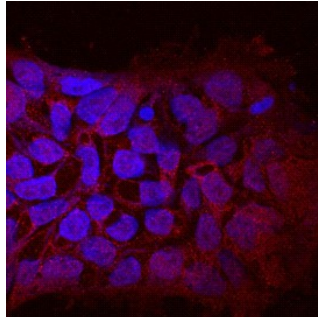
DATA

Western Blot



Detection of Human WTX by Western Blot. Western blot shows lysates of U937 human histiocytic lymphoma cell line. PVDF membrane was probed with 1 µg/mL of Mouse Anti-Human WTX Monoclonal Antibody (Catalog # MAB7374) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). A specific band was detected for WTX at approximately 190 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



WTX in BG01V Human Embryonic Stem Cells. WTX was detected in immersion fixed BG01V human embryonic stem cells using Mouse Anti-Human WTX Monoclonal Antibody (Catalog # MAB7374) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red; Catalog # NL007) and counterstained with DAPI (blue). Specific staining was localized to cytoplasm. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> 12 months from date of receipt, -20 to -70 °C as supplied. 1 month, 2 to 8 °C under sterile conditions after reconstitution. 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

WTX (Wilms Tumor on the X; also FAM123B and AMER1) is a 190-200 kDa member of the FAM123 family of proteins. It is widely expressed in both adult and embryo and appears to have at least three functions: one, it binds WT1 in the nucleus and regulates cell differentiation; two, it associates with the plasma membrane and draws APC away from microtubules, thereby participating in intercellular junction integrity; and three, it binds β-catenin and impacts WNT signaling. Human WTX is 1135 amino acids in length. It contains a PtdIns-P2 binding site (aa 2-209), an acidic domain (aa 370-411), and a Pro-rich region (aa 952-1104). There are three APC binding motifs (aa 280-368; 380-431; 717-834) and the β-catenin binding region lies C-terminal to Gly368. There are two isoform variants. One is 150 kDa in size, nuclear in location, and shows a deletion of aa 50-326. A second shows a 19 aa substitution for aa 786-1135. Over aa 421-573, human WTX shares 89% aa identity with mouse WTX.