

DESCRIPTION

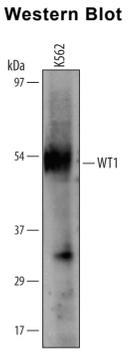
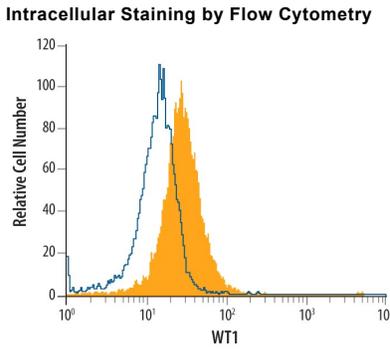
Species Reactivity	Human
Specificity	Detects human WT1 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human WT1 Met127-Gly249 Accession # P19544
Formulation	Lyophilized from a 0.2 µm filtered solution 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
Intracellular Staining by Flow Cytometry	2.5 µg/10 ⁶ cells	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Western Blot</p>  <p>Detection of Human WT1 by Western Blot. Western blot shows lysates of K562 human chronic myelogenous leukemia cell line. PVDF membrane was probed with 1 µg/mL of Goat Anti-Human WT1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5729) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). A specific band was detected for WT1 at approximately 54 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 8.</p>	<p>Intracellular Staining by Flow Cytometry</p>  <p>Detection of WT1 in HL-60 Human Cell Line by Flow Cytometry. HL-60 human acute promyelocytic leukemia cell line was stained with Goat Anti-Human WT1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5729, filled histogram) or control antibody (Catalog # AB-108-C, open histogram), followed by Allophycocyanin-conjugated Anti-Goat IgG Secondary Antibody (Catalog # F0108). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.</p>
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PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
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

WT1 (Wilms' tumor protein 1; also WT33) is a 52-54 kDa, nuclear member of the EGR C2H2-type zinc-finger family of proteins. Although its predicted MW is 49 kDa, it runs anomalously in SDS-PAGE, likely due to a high proline content. It is widely expressed, being found in developing Sertoli cells, glomerular podocytes, neurons, and CD34+ stem cells. Human WT1 is 449 amino acids (aa) in length. It contains a Pro-rich domain (aa 27-83) and four consecutive C2H2 zinc finger regions (aa 323-347; 353-377; 383-405; 414-438). WT1 forms homodimers, and interacts with multiple molecules. Interaction with the zinc fingers generally promotes gene transcription, while N-terminal interactions block gene transcription. There are at least two dozen splice variants. Some are combinations of deletions of aa 250-266 and 408-410, plus an alternate start site 68 aa upstream of the standard site, and a three aa substitution for aa 1-147. Over aa 127-249, human WT1 shares 98% aa identity with mouse WT1.