

## DESCRIPTION

<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TCF7/TCF1 in Western blots.
<b>Source</b>	Polyclonal Goat IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human TCF7/TCF1 Met116-His233 Accession # P36402
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

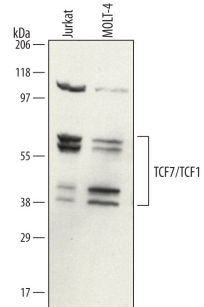
## APPLICATIONS

**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.

	<b>Recommended Concentration</b>	<b>Sample</b>
<b>Western Blot</b>	0.2 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below
<b>Immunohistochemistry</b>	3-15 µg/mL	See Below

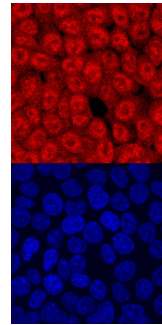
## DATA

### Western Blot



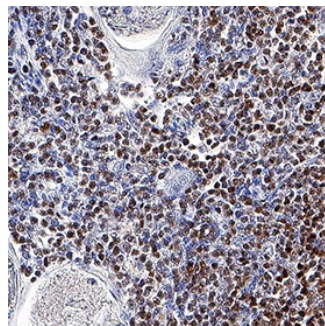
**Detection of Human TCF7/TCF1 by Western Blot.**  
Western blot shows lysates of Jurkat human acute T cell leukemia cell line and MOLT-4 human acute lymphoblastic leukemia cell line. PVDF membrane was probed with 0.2 µg/mL of Goat Anti-Human TCF7/TCF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5596) followed by HRP-conjugated Anti-Goat IgG Secondary Antibody (Catalog # HAF019). Specific bands were detected for TCF7/TCF1 at approximately 60, 40, and 38 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

### Immunocytochemistry



**TCF7/TCF1 in HCT-116 Human Cell Line.** TCF7/TCF1 was detected in immersion fixed HCT-116 human colorectal carcinoma cell line using Human TCF7/TCF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5596) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Goat IgG Secondary Antibody (red, upper panel; Catalog # NL001) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for [Fluorescent ICC Staining of Cells on Coverslips](#).

### Immunohistochemistry



**TCF7/TCF1 in Human Thymus.**  
TCF7/TCF1 was detected in immersion fixed paraffin-embedded sections of human thymus using Goat Anti-Human TCF7/TCF1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF5596) at 3 µg/mL overnight at 4 °C. Tissue was stained using the Anti-Goat HRP-DAB Cell & Tissue Staining Kit (brown; Catalog # CTS008) and counterstained with hematoxylin (blue). Specific staining was localized to nuclei. View our protocol for [Chromogenic IHC Staining of Paraffin-embedded Tissue Sections](#).

## PREPARATION AND STORAGE

<b>Reconstitution</b>	Reconstitute at 0.2 mg/mL in sterile PBS.
<b>Shipping</b>	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
<b>Stability &amp; Storage</b>	<b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 6 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

## BACKGROUND

TCF7 (Transcription factor 7; also T cell factor 1/TCF1) is a 25-50 kDa member of the lymphoid enhancer binding factor family of proteins with 16 isoforms. It is expressed in thymocytes and mature T cells, and serves multiple purposes. In resting cells, TCF family members are transcriptional repressors, and are 25-32 kDa in size. Following activation, large TCF7 isoforms predominate (42-50 kDa), and serve a transcriptional activator function. Human TCF7 is 384 amino acids (aa) in length. This is likely an activating isoform that contains a  $\beta$ -catenin binding domain (aa 1-59), a DNA-binding HMG-box (aa 269-337), and an NLS (aa 344-348). The use of an alternate start site at Met116 seems to characterize repressor isoforms.