

## DESCRIPTION

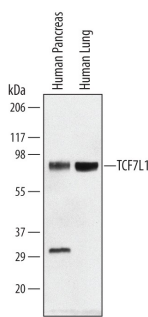
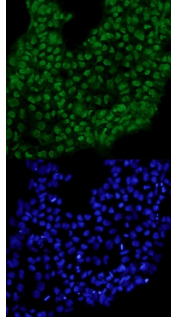
<b>Species Reactivity</b>	Human
<b>Specificity</b>	Detects human TCF7L1 in Western blots.
<b>Source</b>	Polyclonal Sheep IgG
<b>Purification</b>	Antigen Affinity-purified
<b>Immunogen</b>	<i>E. coli</i> -derived recombinant human TCF7L1 Lys429-Ser581 Accession # Q9HCS4
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied 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
<b>Western Blot</b>	0.2 µg/mL	See Below
<b>Immunocytochemistry</b>	5-15 µg/mL	See Below

## DATA

<p><b>Western Blot</b></p>  <p><b>Detection of Human TCF7L1 by Western Blot.</b> Western blot shows lysates of human pancreas and human lung tissue. PVDF Membrane was probed with 0.2 µg/mL of Human TCF7L1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6116) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for TCF7L1 at approximately 70 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.</p>	<p><b>Immunocytochemistry</b></p>  <p><b>TCF7L1 in BG01V Human Stem Cells.</b> TCF7L1 was detected in immersion fixed BG01V human embryonic stem cells using Human TCF7L1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF6116) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 493-conjugated Anti-Sheep IgG Secondary Antibody (green, upper panel; Catalog # NL012) and counterstained with DAPI (blue, lower panel). Specific staining was localized to nuclei. View our protocol for <a href="#">Fluorescent ICC Staining of Cells on Coverslips</a>.</p>
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## 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

Transcription factor 7-like 1 (TCF7L1; also HMG box transcription factor 3, TCF-3) is a 63 kDa member of the TCF/LEF family of proteins. Human TCF7L1 is 588 amino acids (aa) in length and contains one HMG box DNA-binding domain (aa 346-414). Human TCF7L1 shares 95% aa sequence identity with mouse TCF7L1. TCF7L1 is expressed in hair follicles and skin keratinocytes, and at lower levels in stomach epithelium. Functionally, it participates in the Wnt signaling pathway. TCF7L1 binds to DNA and acts as a repressor in the absence of CTNNB1, and as an activator in its presence. TCF7L1 is also necessary for the terminal differentiation of epidermal cells, the formation of keratohyalin granules and the development of the barrier function of the epidermis.